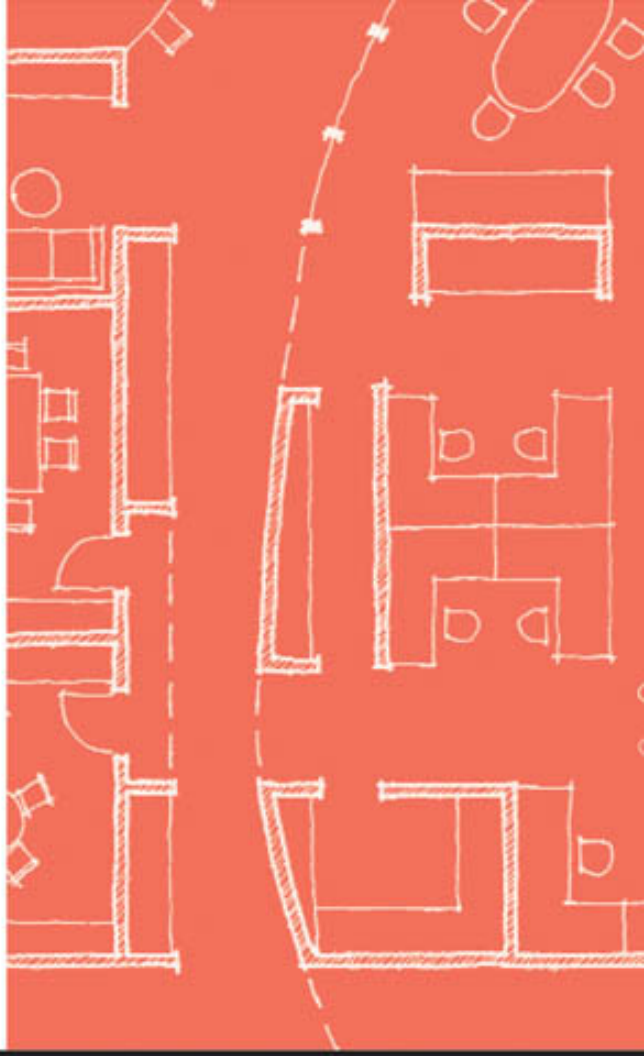
Designing a Better Day



GUIDELINES *for* ADULT *and* DEMENTIA DAY SERVICE CENTERS

Keith Diaz Moore
Lyn Dally Geboy
Gerald D. Weisman

VISIT…

DESIGNING A BETTER DAY

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Designing a Better Day

GUIDELINES *for* ADULT *and* DEMENTIA DAY SERVICES CENTERS

THE JOHNS HOPKINS UNIVERSITY PRESS BALTIMORE

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Printed in the United States of America on acid-free paper
9 8 7 6 5 4 3 2 1

The Johns Hopkins University Press
2715 North Charles Street
Baltimore, Maryland 21218-4363
www.press.jhu.edu

Library of Congress Cataloging-in-Publication Data

Moore, Keith Diaz.
Designing a better day : guidelines for adult and dementia day services centers / Keith Diaz Moore, Lyn Dally Geboy, and Gerald D. Weisman.
p. cm.
Includes bibliographical references and index.
ISBN 0-8018-8415-2 (pbk : alk. paper)
1. Adult day care centers—United States—Handbooks, manuals, etc.
2. Adult day care centers—United States—Design and construction.
3. Older people—Services for—United States—Handbooks, manuals, etc.
4. Dementia—Patients—Services for—United States—Handbooks, manuals, etc. I. Geboy, Lyn Dally, 1961– . II. Weisman, Gerald D. III. Title.
HV1455.2.U6M66 2006
362.6—dc22 2006002643

A catalog record for this book is available from the British Library.

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ACKNOWLEDGMENTS

When the Helen Bader Foundation generously offered their support for the project that provided the basis for this book, we knew that in addressing design of adult day services, we would be compelled to cover the more global issue of care for the elderly and particularly those with dementia. Little did we know how fragmented the literature on adult day services was or how vastly different it was in comparison to congregate care. It did not take us long to realize we were entering uncharted waters. This steeled our resolve to develop a guidebook that could advance environments for older persons with cognitive impairments. Early on, we came to understand that adult day service providers are traditionally underfinanced and often ill-equipped to engage in the complexities of facility development. This knowledge widened our efforts to go beyond design guidelines to providing a framework for successful and systematic navigation of the development process. This occasioned a greater scope than we initially conceived. In the end, we believe this guidebook has great utility, and we hope that it will enhance the quality of life for the many people with dementia who will use adult day services in the future.

This effort would not have been possible without the support and efforts of so many people. First, we thank the Helen Bader Foundation for having the vision and the will to fund a project urgently needed but pursued in a fashion outside the mainstream. Additional support for the feasibility sections of this book was provided by the Group Health Community Foundation. A pat on the back goes to all of those in the Institute on Aging and Environment in the School of Architecture and Urban Planning at the University of Wisconsin–Milwaukee who aided in this project: Andrew Alden, Gowri Betrabet, John Czarnecki, Jennifer Kingsbury, Stacy Mleziva, Yavuz Taneli and LaVonne Wroblewski. Additional thanks go to Anne Hanenburg, Krystal Shockey, and Kelly Krippen, who served as Dr. Diaz Moore's assistants at Washington State University.

We also would like to thank the experts in adult day services who served on our project advisory committee, without whose insight this would not have been possible: Judy Fryback, Department of Family Services for the State of Wisconsin; Nora Gibson, ElderHealth Northwest; David Lindeman, Mather Institute on Aging; Marilyn Lange, Village Adult Day Services; Beth Meyer-Arnold, Luther Manor Adult Day Care; Sue Nelson, formerly of the Barron County Office on Aging; Marie Raschko, Holy Family Adult Day Centers; Mark Sager, Wisconsin Alzheimer's Institute; Avalie Saperstein, Organizational Consultant; and both Dorothy Seaman and Jane Stansell, Alzheimer's Family Care Center. Our deepest gratitude extends to all of those adult day facilities and staffs who made us feel welcome and allowed us to present adult day care as more than a program, but as a place: Alzheimer's Family Care Center, Chicago, Illinois; Caring Place, Waukesha, Wisconsin; Catholic Charities Adult Day Services and Resource Center, Milwaukee,

Wisconsin; ElderCare of Dane County, Madison, Wisconsin; ElderHealth Northwest, Seattle, Washington; Louis Feinstein Alzheimer's Center, Cranston, Rhode Island; Holy Family Adult Day Center, Spokane, Washington; Kiel Adult Day Services Center, Kiel, Wisconsin; Luther Manor Adult Day Care, Milwaukee, Wisconsin; St. Ann Center for Intergenerational Care, St. Francis, Wisconsin; and Shepherd House, Milwaukee, Wisconsin. We would also like to thank the National Adult Day Service Association for their continuous excitement about the project.

Finally, we all would like to thank our respective spouses and children for supporting us in our efforts every step of the way: Laura, Zoe, and Oliver; Scott, Libby, and Sydney; and Suzy and Johana, respectively.

It is with much gratitude that we thank all of these individuals and places for sharing their thoughts, experiences, and places with us.

DESIGNING A BETTER DAY

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Introduction

Setting the Stage for a Better Day

This book is written for everyone involved with the planning, development, operations, or management of adult and dementia day services centers (ADCs), the settings in which a variety of social and/or medical services are provided during the day to cognitively and/or physically impaired elderly. For ADC administrators struggling with an environment that doesn't quite "fit" program needs or seems to be holding the program back in some way, this book offers a wealth of information for diagnosing and addressing discrepancies. By sharing the hard-won lessons of others, it serves as a reassuring guide to people facing such daunting tasks as building a new ADC from the ground up. Clearly explained design principles addressing complexities peculiar to ADCs will help designers or renovators better understand how to create a center that harmonizes the interrelationships among people, program, and physical setting. Visionaries contemplating the idea of creating an adult/dementia day services center, or caregivers considering enrollment of a family member in an ADC and eager to know what to look for in making this decision, will find the book a valuable resource and companion. For advocates and policy makers who want improved ADC policies and procedures, the book sheds light on crucial areas in need of such changes.

Strong ADCs come into being through collaborative, participatory, and inclusive processes. Thus, we designed this book to help everyone—regardless of area of expertise or interest—achieve a better understanding of what it takes to create strong adult day service settings of real quality. Working together, we can build a better day for the most deserving of constituencies: the physically and cognitively frail elderly as well as their families and caregivers.

Adult Day Centers: An Emerging Place Type

We want to be clear about the perspective we bring to this book. As environmental gerontology researchers focused on settings for the elderly and people with dementia, our approach to the topic of adult/dementia day centers is fundamentally interdisciplinary. For far too long there has been a common and counterproductive division of labor among those engaged in the creation of places for the elderly and cognitively impaired. Tradition has it that architects concern themselves with the building, the physical structure of a facility, whereas care providers concentrate on the structure of the organization and the daily programs it provides. Our approach opposes such

specialization. The collective focus must go beyond thinking of the building, organizational mission, and staffing structure independently, to a focus on the living, breathing place that emerges from the system of interactions between people and physical settings.

Place is one of the central, integrating ideas of this book. We define a place in terms of three components—people, program, and physical setting—organized in a coherent fashion. At the intersection of these three components is place experience (figure I.1). While the construct of place may initially seem foreign or artificial, it serves as an effective bridge between the all-too-separate worlds of design, administration, and provision of care. Thinking in terms of places—and the experiences, good or bad, that they engender—is the best way we know to improve upon lessons learned from the past and to develop innovative solutions—solutions that integrate the architectural, the programmatic, the organizational, and the experiential to create supportive settings that successfully meet the needs of the elderly and people with dementia.

Because place components are interrelated, if one component changes, the entire place changes, and so does place experience. How often does a dance club afford a great time one night but the next time turn out to be uncomfortable, perhaps because the music is too loud? The program had changed. Many people have experienced the move of a favorite neighborhood café to a bigger place only to find it no longer the same—the physical setting had changed. Bowling companions may be great fun but may not be appropriate partners for running a day center. Thus people also influence the experience of a place. These illustrations make a critical point: if any one of the three components (people, program, and physical setting) is incongruent with the purposes of the place, the place experience will prove less than optimal. Dysfunctional organizations may try to change their program or their personnel when the problem may be the physical setting.

Our interest in this book goes beyond individual ADCs, as important as they are, to the idea of ADCs as a place type. By *place type* we mean the

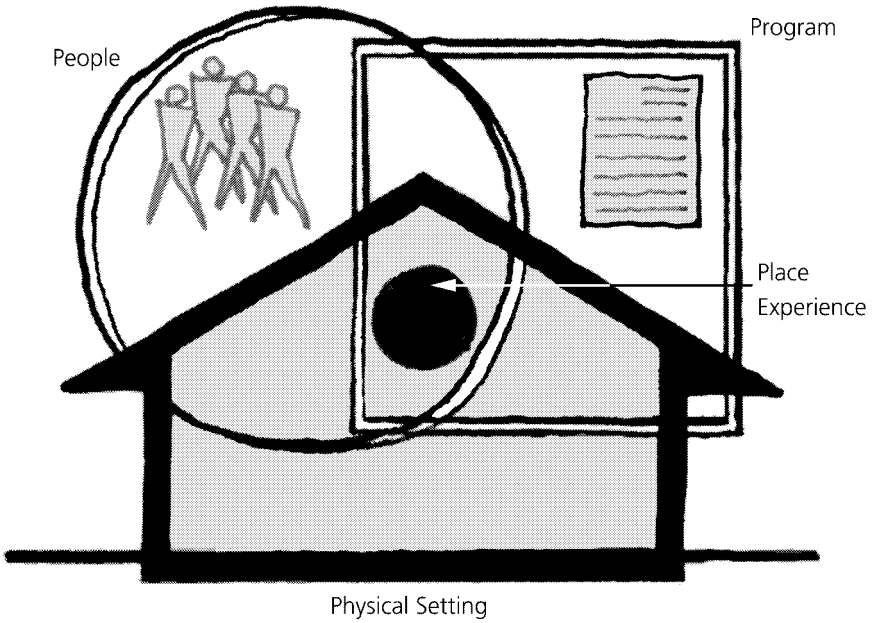


Figure I.1. *Model of Place: Adult day services centers may be understood as being constituted of people, program, and the physical setting. It is through interaction with these three aspects that individuals shape their personal place experiences.*

generic categories of physical settings created to serve specific programmatic needs, often for specific populations, and identified by unique categorical names. Thus while a local community hospital may be different in many ways from a tertiary care medical center, both are still exemplars of this same place type—hospital. Both provide medical care for acutely ill patients. Similarly, while primary schools differ in myriad ways from middle schools and secondary schools, they are all are examples of the place type school, which brings together teachers and students for purposes of education. Place types such as hospital and school, of course, have been around for thousands of years, though notions of medical care and education have varied dramatically over time as has the hospital itself: microsurgery is far removed from bloodletting, and the nurturance of problem-solving skills is very different from rote memorization.

While place types such as school and hospital do undergo substantial change over time, we as a society tend to view their forms—architectural, organizational, and experiential—in normative terms, as unchanging or even inevitable. We know, or believe we know, a great deal about these places before we ever step inside; we may know, often in great detail, what each of these place types looks like, its intended purpose or "program," and society's idea of how we're "supposed" to behave in each. As a consequence, it is difficult for us to imagine these places taking other, less familiar forms. It is only when we experience places that depart from the societal norm—an open plan school, a Planetree hospital, a social rather than medical model nursing home—that we recognize the "taken for granted" way in which we perceive and think about the world around us.

The planning, programming, and design problems associated with ADCs are somewhat different. Rather than being too well-defined as a place type, ADCs are still searching for a common identity. As place types go, adult/dementia day centers—the idea for which first gained national attention in the early 1970s—are a very recent phenomenon. Today, three decades later, most people in our society are still unfamiliar with adult/dementia day services or the purposes ADCs serve. That is why adult day services are often referred to as "the best-kept secret in long-term care." This lack of recognition makes it difficult for people to imagine what a place for adult/dementia day services could or should be like, creating confusion at the societal level. The end result, even for many care providers, is that "adult day center" remains an enigma. Thus it is critical that we clarify these issues. To this end, later in this Introduction we explicitly and precisely specify what we mean by dementia and adult/dementia day service centers, along with other key concepts that relate to ADCs, and develop further the conceptual approach that shapes our approach to these issues (see "Some Important Terms").

The complicated topic to which this book is dedicated can be summed up succinctly: The adult day service center remains an emerging place type because the concept is still new and unfamiliar—architecturally, functionally, organizationally, and experientially—relative to other place types. The context out of which ADCs have emerged—as described in the final section of this Introduction—is equally complex.

This reality of the ADC as an emerging place type has strongly influenced our objectives for this book as well as its content and organization. Our goal is to present the people, programs, and settings that constitute

ADCs not as separate domains but as interrelated components of complex but coherent systems. The structure of this book reflects this goal.

Some Important Terms

As a first step in building this shared vision, we want to provide clear definitions for five sets of important terms used throughout this book. The first set of terms involves the interrelationship among Alzheimer disease, dementia, and cognitive impairment. *Dementia* is a medical syndrome characterized by the impairment of cognitive functions such as memory, the capacity to solve problems of daily living, and the performance of learned perceptual-motor skills. While the most common cause of dementia is Alzheimer disease, it is also caused by Parkinson disease, stroke, AIDS, depression, and other disorders (Alzheimer's Association 1997). For the sake of readability, we will use Alzheimer disease, dementia, and cognitive impairment interchangeably.

The second set of terms we will use relates to the places within which day services for adults are provided. *Adult day services* is now the term preferred by the leading professional service association; it describes, for labeling, a place that offers a variety of health, social, and support services for a less-than-24-hour period to a population of elderly (and sometimes young) adults and people with dementia. In the recent past, these settings have also been called adult day care and adult day centers, terms that we may use interchangeably. We will very often use the acronym ADC (and its plural ADCs) to refer to places that provide adult day services. While the term *dementia day care* has been used to describe a subset of adult day centers that provide care for the cognitively impaired, the overwhelming majority of adult day centers—an estimated 95 percent—provide care to participants with dementia (Zawadski & Von Behren 1990). It is essential, therefore, for care providers to recognize that even if an adult day program does not initially serve individuals with cognitive impairments, they will in the future; in short, every adult day center should be programmed and designed to be "dementia capable" (Alzheimer's Association 1997).

The third set of terms relates to the people who receive adult day services care. These individuals are typically the physically frail elderly and people over the age of 60 with dementia. We will often refer to these people as *program participants,* or more simply, *participants,* and sometimes as *clients.* We will refer to individuals who are cognitively impaired or have dementia as *persons with dementia* or *the cognitively impaired*. Furthermore, the idiosyncratic nature of the disease underscores the need for individualized care in ADCs; the trajectory of Alzheimer's—the nature and pattern of impairment—may vary dramatically from individual to individual. Restating for emphasis, while an ADC may in fact serve individuals with no cognitive impairments, we firmly believe that every ADC program participant—cognitively impaired or not—can benefit from our recommendations, which have emerged from careful consideration of the needs of those individuals with dementia.

Particularly in the second part of the book, Increasing Understanding, we will be referring to ADCs as *holistic.* Within the health care industry, *holism* and *holistic* are often used to refer to alternative and complementary modes of health care in contrast to the traditional biomedical care model. It

is not our intention to draw on this dualism. Holism as we use it is the philosophical perspective underlying systems thinking. The term *holism* comes from the Greek *holos,* or whole, and it has come to refer to a way of viewing any entity (i.e., a human being, an organization, or a building) as a "whole" that is more than the sum of its parts. Specifically, we will treat ADCs in holistic or systemic terms; particular attention will be given in chapter 4 to the benefits of such an approach.

A final set of terms further develop the conceptual framework that guides our thinking about ADCs and the structure of this book. We have already briefly introduced the concept of place. As we employ the term, a *place* is a socio-physical unit—a hospital, a playground, a neighborhood—that is perceived as a real and unified whole within a larger societal context. The scale at which we define a place—from playground to community—will vary according to our interests and purpose. A place has three components: people, program, and physical setting. *Place experience* is the product of the interaction of the three place components. In a care setting such as an ADC, the *people* component includes the constituencies of organizational administration, staff, families, and program participants. *Program* typically refers to the specified series of activities that the care organization has committed itself to perform. The *physical setting* consists of the building shell; the environmental systems that control temperature, light, humidity, and air movement; and the interior furnishings, finishes, and equipment. Shell, environmental control systems, and furnishings and equipment, in turn, create a set of spatial properties (size, shape, and location of spaces) and a set of sensory properties (light, sound and temperature levels, smells, and textures). Collectively, these components of place and the relationships among them comprise a system. It is the relationships among people, program, and physical setting that together create those attributes of experience appropriate to the place and its purposes.

Place experience is a place-specific form of comprehension that emerges from the interaction of people, program, and physical setting; it is reflected in our sense of what a place "feels" like, or how we might characterize its "personality." As described in chapter 3, places for provision of adult day services may be experienced as "familiar" and "comfortable" or as "confusing" and "unfriendly." While psychologists and sociologists tend to focus on overt behavior, experience of places surely reflects perceptions, thoughts, and emotions as well.

A final critical concept is *pattern,* which is closely related to the concept of place. Dictionary definitions reflect everyday usage of the term *pattern* in three interrelated meanings: (1) a regular and predictable arrangement of things or actions; (2) a model or plan used in the making of things; and (3) something worthy of imitation or emulation. Thus the paving pattern of a floor reflects a regular arrangement, a sewing pattern serves as a model for a dress, and a set of house plans in the Sunday paper is sometimes worthy of emulation.

For our purposes, the "regular and predictable arrangement of things or actions" of interest is defined by the people, program, and setting, which together constitute a place. To the extent that we can identify patterns of relationships that engender desired experiences that support the purposes for which a place is created, these patterns are worthy of emulation and can aid

us in the design of other instances of this same place type. Architects Max Silverstein and Murray Jacobson (1985) have suggested that a half-dozen such patterns can define the essential characteristics of most places. Furthermore, such patterns, it is essential to recognize, may be defined at different "levels." For an elementary school, key patterns such as classroom, resource center, or administrative offices exist in spaces within the school such as classroom, resource center, or administrative offices. Following Silverstein & Jacobson, we will refer to these as internal patterns. Alternatively, if one were more interested in the school, not as a whole but in its parts, one could focus on classroom as a place with its own internal patterns such as "A-V station," "rearrangeable tables," and "flexible partitions." In short, what constitutes a place at one level can be viewed as a pattern at a higher level, just as a pattern can be viewed as a place at a lower level.

Core patterns are those that relate to the overall arrangement of the components of the school such as classrooms, administrative offices, support spaces, and playing fields. For us, core patterns as defined by Silverstein & Jacobson capture the essence of a place type. Finally, contextual patterns examine "higher level" factors such as changing educational philosophies that help shape the place type school as a whole.

In addition to the concepts of internal, core, and contextual patterns, we will differentiate patterns in another, more qualitative way. The term *diagnostic pattern* will refer to those recurring and systemic relationships that facilitate an analytical understanding of places, specifically linkages among people, program (typically defined in terms of the day's activities), characteristics of the physical setting, and attributes of place experience. As noted above, the essential characteristics of a place type can often be captured in a half-dozen or so such diagnostic patterns.

We will use the term *prescriptive pattern* to define those relationships between people and settings that contribute to the creation of positive place experience in ADCs and are thus worthy of emulation or adaptation. To the extent that we observe similar relationships (diagnostic patterns) across a range of individual places, we become more confident in advocating the implementation of such arrangements (prescriptive patterns) in other examples of the place type. In this way, patterns help extend our knowledge from the local (diagnostic patterns observed in specific places) to the general (prescriptive patterns that capture the essential characteristics of the overall place type).

How This Book Is Organized

The ten chapters of this book are organized into three parts—Creating Awareness, Increasing Understanding, and Taking Action. Each part addresses one of the three objectives that have shaped the book as a whole.

Awareness

Part I raises the reader's awareness of adult day centers as an emerging place type and specifically their underlying structure. We refer to "structure," not in the bricks-and-mortar sense, but rather to the kinds of patterns that are created when people and space are organized in particular ways. The patterns that provide the underlying structure of ADCs fundamentally influence people's experiences of these places.

We begin by introducing three ADCs, each reflecting a different "personality" type. We employ this approach to places because we believe that places, like people, have personalities. Much as we categorize people in terms of their personalities or personality traits—introverts versus extroverts, for example—we can group places, including ADCs, in terms of their personalities, where the "traits" of place personalities are those attributes of place experience that shape how we feel and act within them. The three examples, or "characters" in chapter 1 are among the most common that we have encountered in our research on environments for the elderly and people with dementia. "Common" is not meant to suggest that these ADCs are identical one to the other or that they are ordinary, but rather that they share similar patterns.

Chapters 2 and 3 offer different yet complementary approaches to "decoding" ADCs in terms of those underlying diagnostic patterns or regularities that contribute significantly to what an ADC ultimately "feels" like (figure I.2). In chapter 2, the "outside-in" social-spatial structure approach analyzes ADCs in objective terms, specifically with respect to the ways people and space are organized (figure I.3a). Does an ADC provide a single large room for participants—as found in ADCs located in church basement social halls, for example—or is it subdivided into smaller areas? Similarly, with respect to people, do all participants spend their days together as one large group, or are they organized into smaller clusters, typically on the basis of diagnoses? We believe that different combinations of these two variables—organization of people and organization of space—can define the universe of ADCs. Furthermore, our research suggests that one specific combination—all participants together in one large space—accounts for the majority of current ADCs.

In contrast, the "inside-out" place-experience-based approach described in chapter 3 relies on the attributes of place experience and the metaphor of personality to offer a complementary way of looking at and analyzing ADCs (figure I.3b). Much as we tend to perceive human personality types in terms of traits (e.g., Girl Next Door = sweet, helpful, and trustworthy; High School Jock = athletic, self-important, and less concerned with schoolwork), place "personalities" can be considered and compared in terms of the distinctive qualities that human beings attribute to places. Fifty years of research in environmental gerontology has brought into focus those qualities of the environment that are most crucial to the aging person. We call these environmental qualities "attributes of place experience" (Diaz Moore, Geboy, Weisman, & Mleziva 2001). These attributes include the extent to which a setting is experienced as conducive to social interaction, supportive of functional abilities, or meaningful in terms of life experiences. These qualities are not inherent in the environment itself, but rather, people attribute them to the environment through the way they experience it.

The experiential attributes framework presented in chapter 3, allows for analysis of the three common ADC personality types introduced in chapter 1 as well as types found in other familiar ADCs. More generally, an analysis of places in terms of place attributes is meant to raise consciousness regarding what it is really like to experience the assets and liabilities of the ADC environment from the perspective of someone who is elderly, physically frail, or cognitively impaired and from the perspective of a care provider. The as-

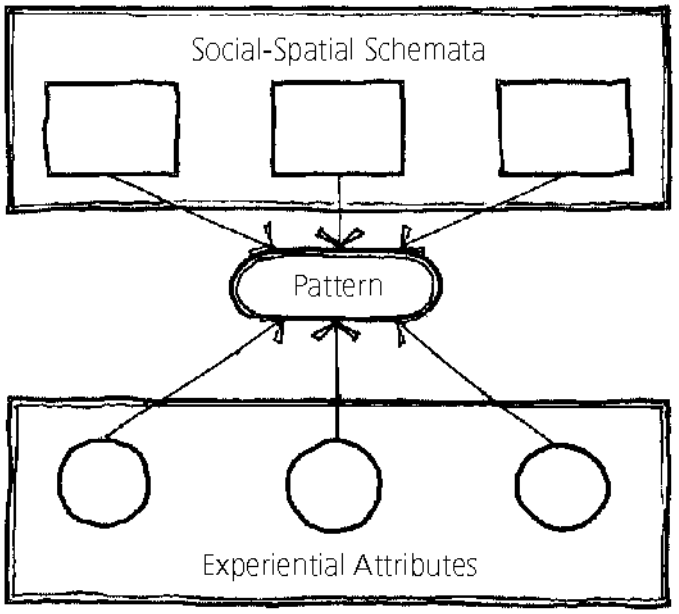
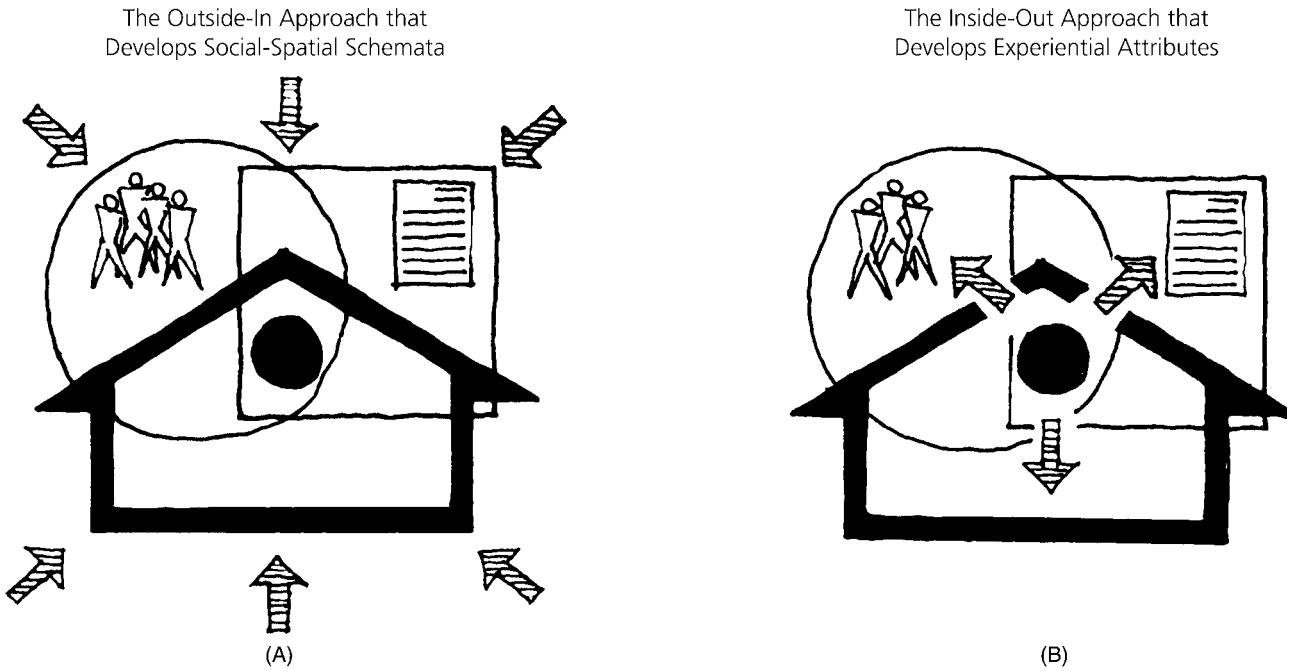


Figure I.2. *Places and patterns may be understood in two ways: from the outside-in, in which observable information is analyzed and results in social-spatial schemata; and from the inside-out, where subjective experiences are accessed and shape the attributes we assess a place to have.*

Figure I.3. *In A, the social-spatial approach views a place from the outside-in, focusing on that which is observable but never able to fully access the ephemeral place experience of individuals. In B, the experiential attribute approach works from the inside-out, tapping people's place experience but finding difficulty in parsing out implications for the various aspects of the model of place. We view the approaches not as exclusionary but as complementary, and necessarily so to inform meaningful place change.*



sets and liabilities the physical environment presents for an adult day services program will be described from the experiential perspective of those who spend their days within that setting as participants or care providers. It will be clear that the physical environment can both impose limitations on an ADC and open up possibilities. Again, we view these two approaches as complementary, with each providing an essential lens for the binocular vision required to examine and analyze ADCs as living places. The goal in both cases is to see the physical environment as a resource. Considering the environment as a resource allows for differentiation between ADC organizations that have used the environment effectively and those that have either overlooked or ignored the environment entirely.

Understanding

The second objective for this book is to explain how an adult day center works as a holistic place-based system. This is covered in part II, Increasing Understanding. Our intention is to describe an adult day center as a system made up of many different and dissimilar components, all interconnected and interdependent in complex ways. Every adult day center is the way it is because it is composed of diverse components (i.e., the building, the program, and the people) that have been brought together and are expected to function under one roof. To make this happen, negotiation, involving all relevant aspects and stakeholders, is essential. While some system components may exert more influence and others may be compromised, it is essential that all participants share a vision, guarding against the impression of "winners" and "losers." Organizational decisions regarding which components prevail will have a significant impact on how people experience the resultant place. Chapter 4 describes in greater detail a particular type of systems thinking we have developed that specifically relates to places and provides a framework for our research on ADCs and for this book. This type of place systems thinking is the foundation of our Model of Place as seen in figure I.1.

Taking Action

Our third objective is to provide information and "tools" that will help make a qualitative difference in an ADC. This third and most detailed part of the book is entitled Taking Action. It focuses on the process of creating an ADC, with an emphasis on "tools for change" that we believe are most useful to those individuals responsible for ADC planning, programming, and design. Building on the Model of Place described in chapter 4, chapter 5 outlines a facility development process that transitions from the likely more familiar world of people and activity programs to the likely less familiar world of architectural program, specifications, and construction documents, using the attributes of place experience as the critical link between the two. Chapters 6 and 7 cover key stages and products of the planning process: developing vision and concept statements, doing a feasibility study, and creating an activity program.

Chapters 8 and 9 present both a process model for developing an architectural program likely to support the intentions underlying the activity program and a set of twenty-two guidelines or prescriptive patterns, many of which are drawn from our analysis and discovery of "what works in prac-

tice" in existing ADCs. The patterns in both chapters range from very modest to quite substantial in terms of the required investment in time, effort, and money. Chapter 8 presents a set of prescriptive patterns that we are confident would facilitate the daily life activities that typically occur in an adult day services center, while chapter 9 focuses on patterns related to health and related support services. Chapter 10 presents a procedure for conducting a "walk-through evaluation" of any existing ADC, the Adult/Dementia Day Center Environmental Assessment (ADC EA). In the final chapter we offer a set of concluding observations that stake out the remaining challenges confronting this exciting place type.

Although Adult Day Services have been around for almost thirty years, their potential for providing efficient, community-based therapeutic care has been under-recognized. Our premise is that with effective collaborative and participatory processes, Adult Day Services of exceptional therapeutic quality can and will be created and that these model places can then serve as agents for change. Working together, we can build a better day for the most deserving of constituencies: the physically and cognitively frail elderly as well as their families and caregivers.

1.

Putting ADCs in Context

The Historical and Societal Origins of ADCs

A little background will help put ADCs in context and convey some idea of how ADCs have become the place type they are today. Four historical and societal factors—or contextual patterns—have shaped the ADC place type (figure 1.1): (1) our aging society; (2) the origins of the ADC in (medical) day hospital and (social) day center precedents; (3) economic pressures (the push of the social and economic costs of institutionalization of the elderly and the pull of the "patchwork" nonprofit funding environment) under which ADCs operate; and (4) the desire of most older adults to remain in their homes for as long as possible, that is, to age in place.

Contextual Pattern 1: Our Aging Society

In our society, the issue of aging is a relatively new phenomenon. When our country was founded in 1776, the average life expectancy was 35 years of age. Anyone who lived into his senior years was likely wealthy and had extended family living in the community that could provide care. With industrialization came enhanced diet (e.g., transport of foods and refrigeration), but there was also increased geographic dispersion of family members through both homesteading and the settlement of urban industrial centers. As life expectancy rose toward the end of the nineteenth century, for those of scant economic and social capital the societal response to the "problem" of the old and indigent was to place them in custodial care facilities. Whether they were consigned to county poor farms and almshouses, private "homes for the aged" (usually operated by charitable, religious organizations and provided as a service to their members), or, for families who could afford the expense, boarding houses, all of these options effectively removed the "unwanted" aged from view and society.

Following passage of the Social Security Act of 1935, which promoted independence and self-sufficiency among the needy elderly, the number of public custodial care facilities declined dramatically as federal funds were conditionally denied to any "inmate of a public institution." Institutionalization of the elderly was no longer a response to a social ill but rather a response to medical necessity. As a consequence, nursing homes flourished, and aging became associated with illness (O'Brien 1982). After expansion of the Hill-Burton Act of 1954, which made federal support available for the

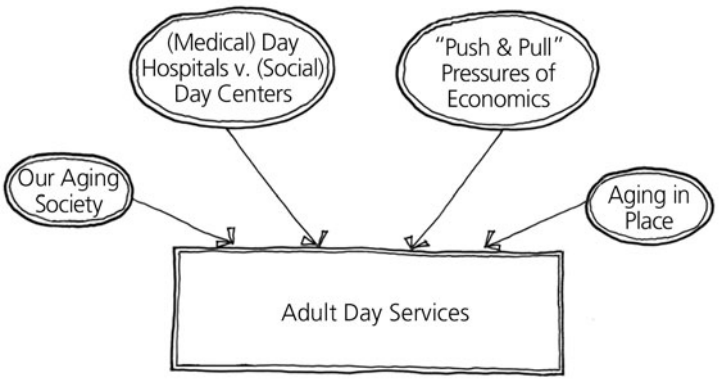

(Medical) Day Hospitals v. (Social) Day Centers
"Push & Pull" Pressures of Economics
Our Aging Society
Aging in Place
Adult Day Services

Figure 1.1. *Four contextual patterns that have shaped Adult Day Services as a place type.*

construction of nursing homes as well as hospitals, the regulation of nursing homes began being heavily influenced by the regulation of acute care hospitals (Vladeck 1980). Nursing homes, known as skilled nursing facilities (SNFs), came to be designed and organized along the lines of the "medical model" of care exemplified by acute care hospitals. The enactment of the federal assistance programs of Medicare and Medicaid in 1965 further reinforced this institutional model of long-term care for the elderly; reimbursement for services became inextricably linked to hospitalization or institutionalization. Thus, within fifty years, the dominant characterization of "aging as a social problem" shifted to "aging as illness," where "the presenting problem is a disease condition that needs treatment, the subject is a patient with presenting symptoms, and the relevant background factors are a health history and the etiology of the disease" (Johnson & Grant 1985, 140).

A well-publicized series of scandals in the 1950s and 1960s, however, documented some horrendous nursing home conditions, raising questions about nursing home care in general. Research studies of the period revealed that a number of nursing homes housed residents who did not require full-time care; had there been community-based alternatives, they would not have been institutionalized (American Nurses Association 1975; U.S. Special Committee on Aging 1971). Moreover, institutionalization actually exacerbated the difficulties associated with life with a chronic condition (Lawton & Simon 1968; see also Goffman 1961). For the latter part of the twentieth century, alternative models of long-term care emerged, including residential models such as assisted living and continuing care retirement communities, as well as community-based options such as home care and adult day services.

Contextual Pattern 2: Precedents: (Medical) Day Hospital / (Social) Day Centers

The origin of adult day centers for the elderly in the United States can be traced back to the development of the first psychiatric day hospital in Moscow, Russia, in the early 1930s (Kramer 1962). In an attempt to remedy an acute shortage of inpatient hospital beds, the practice of early patient discharge was adopted. In order to provide necessary follow-up care, administrators developed the idea of creating a setting where patients could receive care during the day and return home at night (O'Brien 1982). Following

the Russian psychiatric day hospital model, the British initiated use of the day hospital to provide care to the elderly disabled beginning in the 1960s (Padula 1983). Again, hospital administrators realized that acute care patients could be discharged earlier, provided they received follow-up outpatient treatment. With an emphasis on medical rehabilitation and treatment, the English geriatric day hospitals (often located within acute care hospital facilities) offered a variety of medical therapies; medical and nursing care; some social activities and group work; and ancillary services such as dentistry, foot care, hair care, and nutritious meals (Andrews 1970; Brocklehurst 1970). The day hospital concept was imported to the United States in the late 1960s by a British physician, Dr. Lionel Cosin, whose psychiatric patients in Cherry Hospital in Goldsboro, North Carolina, attended the day program in order to develop skills (i.e., activities of daily living and use of community support services) that would enable them to live independently following discharge (Goldston 1989).

According to O'Brien (1982), the need for a more social and less medically intensive model of day care became apparent by the early 1970s. This new, more social model of care for the elderly was offered in places called "day centers," facilities that provided companionship, meals, and sometimes baths, but none of the medical services that characterized the geriatric day hospitals. As O'Brien sees it (also see Brocklehurst 1970), the day center differs from the day hospital in four ways: the services provided (social versus medical and rehabilitative); the client population (the frail elderly rather than the elderly at risk of institutionalization); the expected outcomes (peer support and social activities rather than therapeutic and rehabilitative activities aimed at increasing functional abilities); and staffing (run by local and/or voluntary agencies versus hospital-sponsored). This social versus medical understanding of approaches to adult day services was reified in the research conducted by Weissert and colleagues in the late 1980s (Weissert et al. 1990) with the unfortunate consequence of obscuring the much broader variation in the character and content of such services. Conrad and colleagues (1993) conducted a cluster analysis of adult day services and activities found in adult day settings and suggested six classes of adult day services: Alzheimer's family care, rehabilitation, high intensity clinical/social, moderate intensity clinical/social, general purpose, and low scoring. This classification continues to reflect the importance of defining adult day in terms of services rendered and population served. As we will discover in the subsequent discussion, finding an appropriate balance between social, medical, and rehabilitative services, and defining participant profile remain central challenges for ADCs operating today.

Contextual Pattern 3: The "Push and Pull" of Economic Pressures

The United States has been slow to recognize the social and economic costs of institutionalization of the elderly. While nursing home care accounted for 1.5 percent of all personal health expenditures in 1950, by 1981 the figure had risen to 9.4 percent (Brewster 1984). Care provided in nursing homes is considered long-term care (LTC), a broad term that refers to assistance for people unable to care for themselves due to a prolonged illness or inability to function independently. Nationwide, LTC spending in 1995 from all

sources (state, federal, public, private) was $107 billion; annual inflation of 3 percent could result in costs of $224 billion in 2020 (Public Sector Consultants 1998). Currently, the annual cost of nursing home care averages $57,700, or approximately $4,800 per month, which for many low-income individuals is covered by Medicaid. For assisted living, costs vary widely but average approximately $2,000 per month. Golant (1999) estimates that only 10 percent of the elderly are able to afford assisted living and that long-term care for moderate-income elderly remains a significant challenge.

The search for more humane, less costly alternatives to institutionalized long-term care continues to gain momentum. The summary judgment of long-term care professionals was that "the quality of life for elderly people who remain in the community and receive care is better than for those who enter long-term care facilities" (Billings 1982, 2; see also Lawton 1986). Furthermore, many professionals believed that expanding community health and social services was a cost-effective strategy (Nusberg 1983–84). In support of the development of community-based programs for the elderly and disabled at risk of institutionalization, the U.S. Department of Health, Education and Welfare in 1981 broadened Medicaid's emphasis, establishing a program of home- and community-based services waivers (Section 1915(c) of the Social Security Act of 1981), allowing states to fund services provided by these care alternatives. These waiver programs have been expanded several times since; however, these funding streams are still quite difficult for adult day providers to access and often place them in the uncomfortable position of competing with agencies such as home health care for the same pot of money.

Part of the problem for adult day services is that residential care services for the elderly have been supported by established health care and faith-based organizations, whereas adult day services have generally been community-based, responding to the character of the locality and to the specific needs of participants. Advocates of adult day services recognized early on—consistent with the model of place employed in this book—that the needs of the elderly were not solely functional or physical in nature and that the interaction of these two needs involved psychosocial issues as well. Thus, many adult day centers today are committed to taking an expansive approach to their services, offering mixes of medical and social care, changing and adapting as the needs of their constituents change. This fluid approach—which is diametrically opposed to the rigidity characteristic of the traditional institutionalized continuum of care—does, however, exact its own costs. While the rich diversity in adult day services reflects the various strategies that ADCs use in responding and adapting to the needs of participants, it has had the less-desirable effect of creating ambiguity among regulatory and funding bodies as well as the public at large. As a consequence of this continual economic uncertainty, "ADCs are in a constant state of adaptation in regard to their funding and regulatory environment. In turn, the environment shapes the delivery of ADC services" (Bradsher et al. 1995, 20). The funding stream continues to be inconsistent and fragmented (RWJF 2000), what Kane and Kane (1987) refer to as "piecework and patchwork."

Contextual Pattern 4: The Desire to Age in Place

Pastalan (1990) and Pynoos (1990) describe *aging in place* as not having to move from one's present residence in order to secure the necessary support services in response to changing needs related to aging. The desire to age in place is widespread and can be expected to intensify. In the most recent of the AARP national senior housing surveys (2000), 89 percent of respondents age 55 and older reported they would like to remain in their current residences for as long as possible, a 5 percent increase over responses to the same question in earlier surveys. Furthermore, when asked about housing preference in the event they might need help in caring for themselves, 82 percent reported they would prefer not to move from their current home (AARP 2000). A trend this strong suggests that care providers who can help sustain the elderly and persons with dementia in their own homes will be in increasing demand through the coming years. By offering a range of supportive services, ADCs will likely be able to respond to market demand.

Adult Day Services Today

The place type, adult day service center (ADC), as we know it today, has emerged from diverse contextual factors. According to the National Adult Day Services Association:

> Adult day services are community-based group programs designed to meet the needs of adults with impairments through individual plans of care. These structured, comprehensive, nonresidential programs provide a variety of health, social and related support services in a protective setting. By supporting families and other caregivers, adult day services enable participants to live in the community. (NADSA 2002, 1)

ADCs typically operate during normal daytime business hours during the day, generally five (business) days a week, although some facilities provide respite care in the evening and on weekends. According to NADSA (2002), the principal services of ADCs are assessment and care planning, assistance with activities of daily living, health-related services, social services, therapeutic activities, nutrition, transportation, and emergency care (see table 1.1). This expansive conceptualization is intentional: The "purpose, focus, functions and expected outcomes of adult day programs are so broadly defined as to allow a variety of programs to fit under the adult day services umbrella" (Travis 2001, 62).

Ironically, the desire to be inclusive may be partly responsible for both geographically inconsistent growth and increased variability among ADCs. As noted in Contextual Pattern # 3, caring for diverse groups of participants compels most ADCs in the United States to operate under "patchwork" funding structures, which may be one of the strongest forces behind varied patterns of center development (Burke, Hudson, & Eubanks 1990). As funding entities tend to impose specific care requirements on ADC providers, centers take on characteristics that fit the expectations and conditions of the funders (Travis 1997). The general orientation toward more fluid care (compared to the static level of care provided in institutions for the elderly such as nursing homes) "places ADCs in a position of economic uncertainty, fo-

Table 1.1. Services Provided by ADCs, 2001–2002

Type of service	*ADCs that offer service (%)*
Therapeutic activities	97
Personal assistance with ADLs	96
Meals	84
Social services	82
Health-related services	74
Medication management	70
Transportation	68
Personal care services	64
Caregiver support groups	60
Rehabilitation therapy	28

Note: Adapted from the Public Policy Institute Fact Sheet on Adult Day Services, American Association of Retired People, 2004.

cused on survival and maintaining the flow of funding, and on maintaining organizational viability" (Bradsher, Estes, & Stuart 1995, 20).

ADCs vary widely in terms of their philosophy and orientation, case mix, funding mechanisms, and physical settings (Geboy et al. 2001). Some variation is due in part to the fact that many ADCs are "affiliated with larger organizations such as home care, skilled nursing facilities, medical centers, or multi-purpose senior centers" (NCOA 2000–2001, ¶ 5). As a consequence of unstable market environments, service mix, and associational variety, ADCs can be found in a variety of building types, ranging from new purpose-built facilities and renovated office buildings to remodeled residences and the proverbial church basement (Geboy et al. 2001).

Adult and dementia day centers are continuing to emerge as a new and important component in the continuum of care environments for the elderly. In 1974, there were 15 programs in operation in the country (Morrison 1980). By 1978, there were 300; between 1989 and 2002, the number of adult day centers increased from 2,100 to roughly 3,800 (Cox 2003). This growth represents more than a 25,000 percent increase in the number of adult day centers over the 28-year period 1974 to 2002. Even this phenomenal rate of growth may not be enough to support the increasing need, however. According to Partners in Caregiving: The Dementia Services Program, a 4.5 year, $2.5 million project sponsored by the Robert Wood Johnson Foundation, the existing needs of U.S. elderly could support an estimated 10,000 adult and dementia day centers across the country (Waggoner 2000, ¶ 40). According to these calculations, the current supply of adult day services meets only about one-third of the demand, much of the gap in rural areas. Recent projections indicate the gap will widen: the number of Americans with Alzheimer's may triple by the year 2050 from the current 4.6 million to 16 million. Furthermore, contrary to predictions from ten years ago, more people are expected to live beyond age 85, and more than half of those over 85 are expected to develop some form of dementia. Given demographic trends and trajectories in health and economic status, it is quite possible that that by 2050, the United States will need over 30,000 adult day service cen-

ters. Quite simply, ADCs are an emerging place type that can be expected to increase dramatically over the first half of the twenty-first century.

Character Profiles of Three Common Day Centers

While the previous sections provide an important context within which to understand adult day service centers, it no doubt remains difficult to imagine exactly what an ADC is. What does it look like? What does it feel like? How does it operate? To lay the foundation for an increased understanding of adult day service centers we will introduce three ADCs, each representative of a more general type and each with a very different "personality"—that is, how they "feel," experientially. The three ADC personality types described in the next few paragraphs are among the most common that we have encountered. In the course of our research on environments for the elderly and people with dementia, we have visited a range of ADCs that vary in many ways; they range from the small to the large both in terms of space (1,700 to 40,000 square feet) and in daily census (6 to 55). Despite this diversity, some ADCs share common features. In order to talk about them more evocatively, we have given each of these representative ADCs a name: Lord's Way ADC, Midcity ADC, and Lake Park ADC.

Lord's Way ADC

Lord's Way is located in the basement of a church. Because the church is a registered national historical landmark, modifications to the exterior of the building are not permitted. The program space consists of one large room, more or less rectangular. At $32' \times 70'$, the space is roughly twice as long as it is wide (about 2,200 square feet in total). Because of its basement location, the space has only three small windows, located toward the top of one of the short walls. While a little sunlight always manages to find its way into the program space each day, the view is of the concrete window wells. Closet storage for participants' coats and personal things as well as activity materials is located on the long wall opposite the entry. The open kitchen lines the far short wall. For the most part, the large space is called the Dining/Activity Area. Three 8-foot banquet tables, each surrounded by eight folding metal chairs, are clustered near the kitchen; more folding chairs are gathered in a semi-circle at the opposite end of the space. Staff uses the kitchen to prepare snacks only, since Lord's Way ADC has contracted with the local hospital to deliver the prepared noon meals daily. The kitchen is flanked by the toilets and bathing room. The two toilet rooms (men's and women's), which open directly onto the program space, are each outfitted with three toilets (two standard, one ADA compliant) in ganged stalls. The bathing room, which also opens directly onto the program space, is located in the far corner. It has one tub, surrounded by a cloth curtain. Participants at Lord's Way ADC—about twenty each day—represent a wide variety of strengths and abilities. Half are cognitively impaired; most require assistance with two or three activities of daily living (ADLs); one-third are incontinent; and three (15%) use wheelchairs. Eight full-time staff members and one nurse work three days a week. By virtue of its location as well as other characteristics described in chapters 2 and 3, Lord's Way is an example of the *Church Basement* type of ADC.

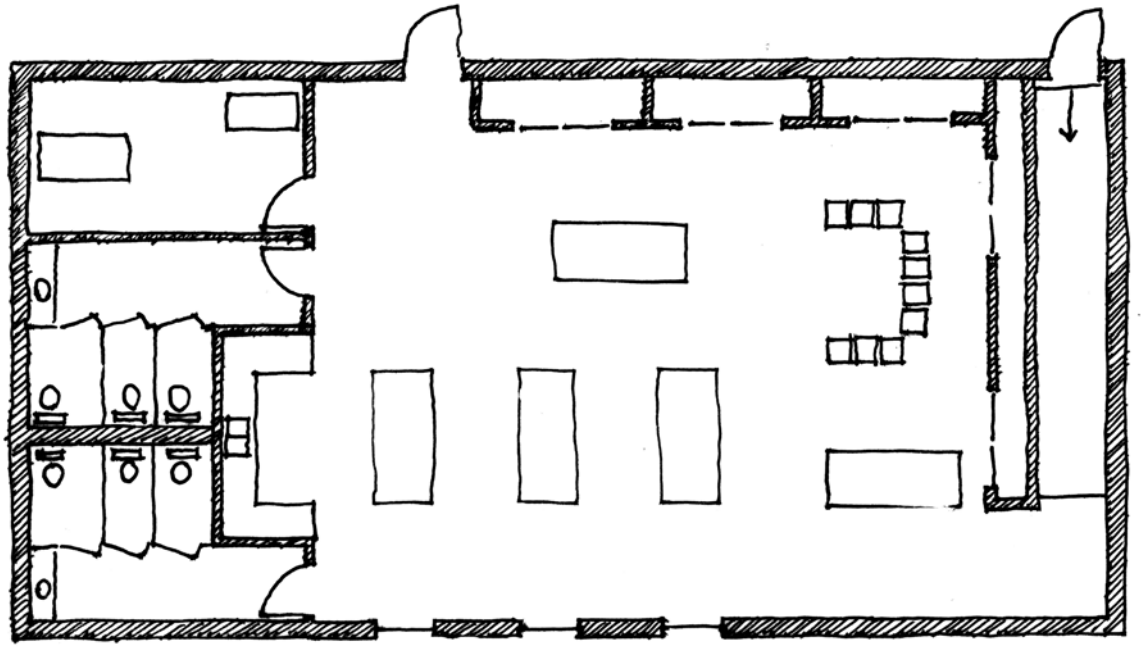


Figure 1.2. *Floor plan of Lord's Way*

Midcity ADC

Midcity ADC is located in a single-story commercial office/light industrial building remodeled specifically to house an adult and dementia day program. For many years, Midcity provided adult/dementia day services in a single large space not so different than that occupied by Lord's Way. This not very satisfying experience prompted the Midcity staff to fundamentally change its operational strategy and adopt new policies. Staff decided to divide participants into groups on the basis of attention span; these different groups then spend their day in separate rooms. Today, the program uses six rooms for four distinct participant groups. The most highly functioning group uses three rooms, the Blue, Green, and Red rooms. Each of the remaining three groups of lower and varied functional ability participants is assigned to a separate room, the Yellow, Orange, and Teal rooms. The six program rooms range in size from 12′ × 12′ to 17′ × 20′. While five rooms have a window on one wall, the Yellow Room, an internal space, has none, and the blind on the small window in the Teal Room is perpetually closed. Centrally located men's and women's toilet rooms have four toilets each, with ganged metal partition stalls. Midcity ADC averages 55 participants daily. One hundred percent are cognitively impaired. Fifty percent require assistance with three or more ADLs; 60 percent are incontinent; and 10 percent use wheelchairs. There are twenty full-time staff members. Given its honeycomb of small, closed spaces arrayed along internal corridors, Midcity has the character of a suite of professional spaces. We thus place it into the category of *Doctors' Office* ADCs.

Lake Park ADC

Lake Park ADC is a purpose-built facility; that is to say, the facility was planned, designed, and constructed for the explicit purpose of housing an

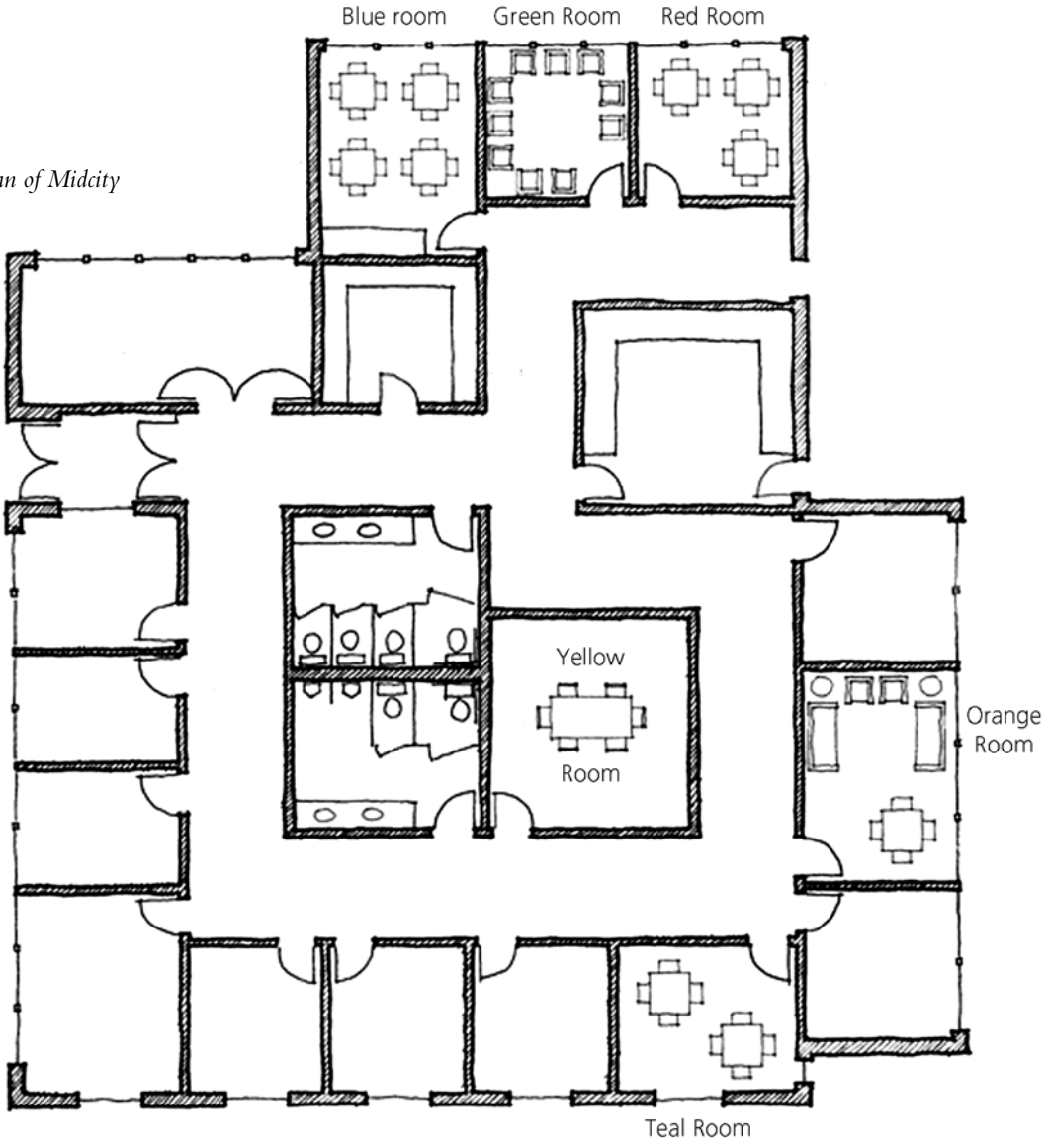
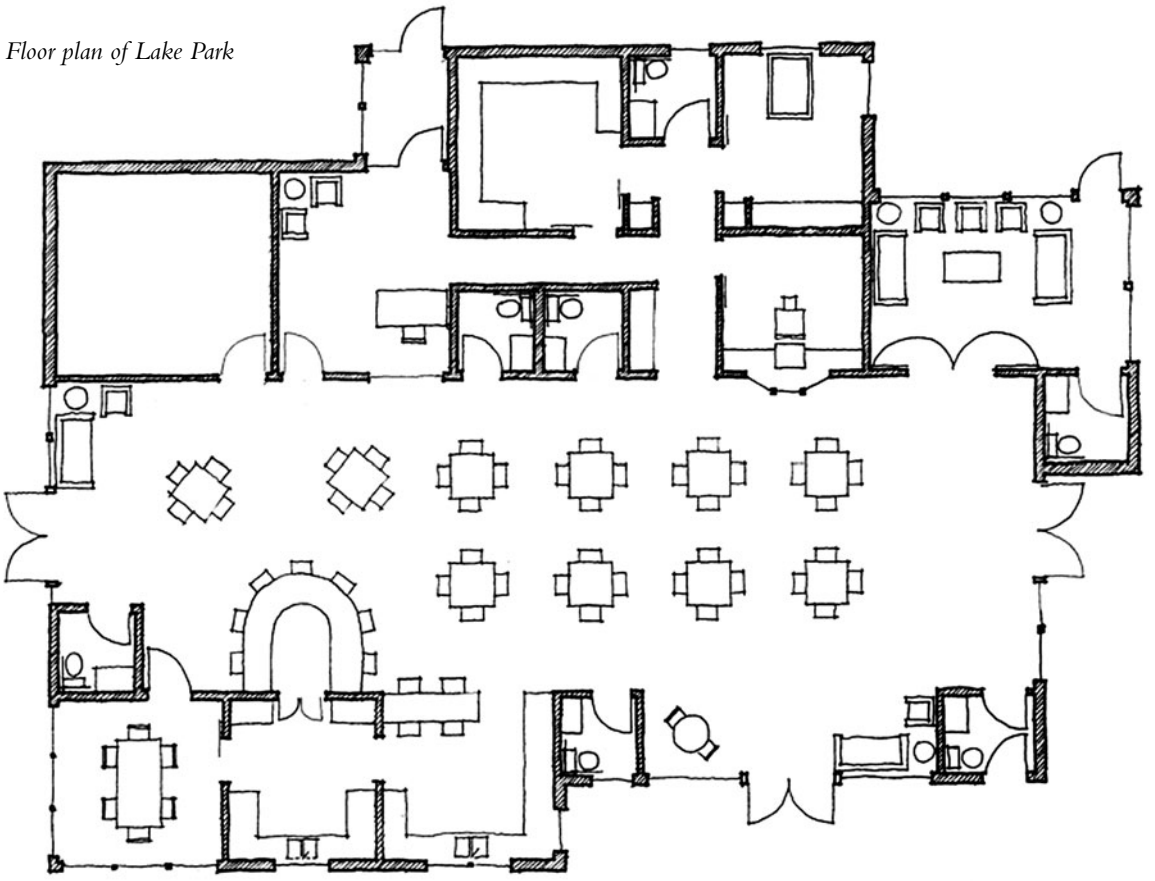


Figure 1.3. *Floor plan of Midcity*

adult/dementia day center. While Lake Park, like Lord's Way, is essentially one large, roughly rectangular space, a variety of architectural devices—a breakfast bar, bay windows, and alcoves that create seating nooks—define smaller "sub-settings" within it. At 24′ × 72′, the main program space is quite long and narrow. The unified decorating scheme as well as wood floors, Windsor chairs, and an abundance of plants make for an aesthetically pleasing space. Large windows on three walls frame views of the adjoining park. Three or more concurrent activities take place in five sub-settings within the program space, but tend to be concentrated in the dining area, the breakfast bar, and the family room. Participants typically begin their days with coffee at the breakfast bar. Mid-morning, some proceed to the family room to talk about current events, while others stay to help with the dishes in the centrally located kitchen. Participants can take lunch in the dining area, in the kitchen, at the breakfast bar, or in the dining nook. Staff serve lunch with the help of participants. Afternoon events take place concurrently in the dining area, the kitchen, at the breakfast bar, and on the patio as weather permits. Private toilet rooms are distributed throughout the space, ensuring easy

Figure 1.4. *Floor plan of Lake Park*



visibility and easy access. A private bathing room is located adjacent to the beauty salon. Lake Park averages 45 participants daily; 100 percent of them have cognitive impairments. Almost half require assistance with three or more ADLs; 60 percent are incontinent; and 20 percent use Licensed Practical Nurses (LPNs) or Registered Nurses (RNs). In many ways Lake Park follows the model of the hospitality industry, as opposed to the health care or social service industries. Thus we view Lake Park as an example of the *Country Inn* type of ADC.

Having introduced these three ADCs as the "cast of characters," in the two following chapters we will analyze them from a variety of different perspectives. Our goal is to describe the factors that shape their personalities and explain which of their features can be profitably applied in other adult day service settings.

2.

The Social/Spatial Structure Approach

Diagnostic Patterns in ADCs

By visiting and analyzing a diverse sample of ADCs, the largest having twenty-five times the area of the smallest and a census eight times as large, we were able to identify the three most common types of adult day service settings (Geboy et al. 2001). As part of our diagnostic process, we sought out what we believed to be the most important differences between these places as well as their underlying commonalities, though the latter are often masked by superficial variations. Our goal was to determine whether these ADCs could be usefully grouped into a minimal number of "types" of similar "personalities." As demonstrated in chapter 1, we concluded that ADCs can indeed be divided into types—the Church Basement, the Doctor's Office, and the Country Inn.

In this chapter we will consider one facet of this process of discovery and diagnosis, the *social-spatial structure* of ADCs. The ways in which ADCs organize both space (few spaces or many) and participants (a single large group or several smaller ones) are fundamental in shaping the character of ADCs and, in turn, the kinds of place experiences they afford both clients and caregivers.

Pattern Seeking

We discerned the three common ADC types through a process of "pattern seeking," which allowed for an examination of places both individually and generally; we considered each ADC a unique one-of-a-kind place as well as an exemplar of a particular class of ADCs in general. We focused on "patterns" and "places," both of which can be considered distinct units of interconnected activity and space. Since we analyzed and "diagnosed" every ADC in terms of its distinguishing patterns and combinations of patterns, it is essential, before describing the process in detail, to clarify the terms *patterns* and *places.*

The idea of patterns is a familiar one. Soon-to-wed couples contemplate china patterns, looking for the perfect one. Wallpaper patterns remind us of the home of a favorite aunt or grandparent. These types of patterns represent *a regular and predictable arrangement of things or actions.* A somewhat different type of pattern might be used in a craft such as sewing, knitting, quilt-

ing, or woodworking. Here the pattern is *a plan or model for making something;* these patterns often remain relatively generic and adjustable to the needs of each individual. Likewise, patterns of behavior and fingerprint patterns, while unique to each person, can still be categorized. Despite the differences, this range of definitions suggests several important commonalities about patterns in general: first, it is possible to discern some regularity or order to what might at first appear to be disordered objects and events; second, many of these objects or events can be reproduced with the help of a model, plan, design, or outline; and finally, patterns that have been shown to "work" in the past not only can but should be emulated and replicated.

Patterns and Places

Identifying patterns that connect activity and space is key to diagnosing place type. Within a domestic kitchen, for example, we could identify patterns such as "window over the sink," "work triangle," and "country kitchen." The pattern Window over the Sink focuses on two important kitchen elements—window and sink—and the positive experience—looking outside while washing the dishes—that results from a particular relationship between the two elements. The pattern Work Triangle focuses on the distance between important elements, in this case refrigerator, sink, and oven, and the sense of convenience or inconvenience this relationship engenders. Country Kitchen focuses on particular qualities of the kitchen as a whole—style, size, openness—rather than on specific elements (sink, window) or relationships (distance). Thus we can characterize and categorize the place type Kitchen in terms of its constituent patterns.

If we shift up to a higher level, Single Family House, then Kitchen, along with Family Room, Bathroom, and Bedroom, would be considered the essential patterns to Single Family House as a place type, and attention shifts to the relationship among the constituent or essential patterns. Thus places—such as Single Family Home—can be thought of as a set of interconnected activity or space patterns. Similarly, the place type School can be analyzed in terms of a series of internal patterns such as Cafeteria, Instructional Rooms, Gym, Principal's Office, and so on (Childress 2000). These place type labels—School, Hospital, or Prison—become a sort of shorthand that lets us know what we can expect within them. Fast Food Restaurant conjures up an image of the physical setting (ceramic tile, stainless steel, uncomfortable fiberglass chairs), likely users (lots of kids, most of them noisy), acceptable and expected behavior, and even the menu. The disadvantage of this shorthand is that people—at the level of individuals, groups, organizations, and society—come to take certain place type patterns for granted, assuming that they serve a necessary or desired purpose when in fact they might not. Thus it is our goal to serve as "place detectives," seeking out the critical patterns that define a place type (of which Silverstein & Jacobson 1985 suggest there is often approximately a half-dozen) and indicate whether the interaction of these patterns yields a desirable place experience.

Diagnosing Prevalent ADC Types

Employing the concepts of place and pattern, we analyzed and "diagnosed" ADCs in terms of their distinguishing patterns and combinations of patterns.

This process is diagnostic in that it allowed for an examination of the vital activity and space characteristics of an ADC in the same way that a doctor classifies symptoms and makes a diagnosis. First, we analyzed each ADC individually with regard to the patterns at work within it; then we compared patterns from all ADCs in order to identify patterns of regularity among the patterns. In our efforts to analyze ADCs, to understand their commonalities and their differences, two fundamental structural factors emerged as most significant: how the ADC organized people (one group or several), and how the ADC organized space (one space or several). To understand their impact, however, we could not consider these two factors independently.

As a system, an ADC as a place emerges from the interaction of people (and their activities) and space; these two factors (people and space) must be considered together. A simple two-factor matrix (not so different from a mileage chart on a road map) makes this task fairly straightforward. In the ADC People-Space Matrix (table 2.1), the vertical axis represents Organization of Space, and the horizontal axis represents Organization of People. Both factors are defined in terms of three levels. Thus division of space ranges from No Division (one single, undifferentiated space) to Substantial Division (an ADC consists of many separate rooms), with Partial Division as the midpoint (some open space, some separate rooms). Division of People refers to the practice common in ADCs of dividing participants by diagnosis, functional ability, or level of tolerable stimulation. Division of people ranges from No Division (no differentiation among program participants) to Division (differentiation of program participants on the basis of "similar-to" or "different-from" characteristics), with Partial Division (some level of differentiation of program participants, e.g., by functional ability, or by time of day) as the midpoint.

This 3×3 table yields 9 possible combinations of division of people and space. For purposes of illustration, we have entered two familiar place types in this matrix. One Room Schoolhouse (in the bottom right cell of table 2.1) divides students by age and grade level yet accommodates all of them within a single undivided place. Conversely, the typical Single Family Home (upper left cell of the table) provides a set of highly differentiated spaces (living room, kitchen, bedrooms) for a single undifferentiated group of people, a family.

With respect to ADCs, the matrix shows the three common ADC types introduced in chapter 1. The Lord's Way ADC in the lower left of the matrix divides neither people nor space. It exemplifies the Church Basement type of ADC. This term reflects not only the origin and location of many ADCs but also its essential characteristics with respect to organization of people and space. Because such basement space is often borrowed—otherwise utilized by the religious organization on their day of worship—the space cannot be spatially divided or differentiated, and supportive resources are scarce. The coercive power of a large space is quite significant: it demands that all the day's activities occur in one large group within this one large space, regardless of the nature of the activity. As Diaz Moore (2000, 348) notes, "the ill-defined and uniform stimulation found in 'The Church Basement' together with its unrelenting social obligation, encourages withdrawal."

In direct contrast with Lord's Way is Midcity ADC, positioned in the upper right of the matrix. Midcity's program area comprises several small rooms accommodating participants at differing levels of disability, each room op-

Table 2.1. Social/Spatial Structure Analysis: ADC People-Space Matrix

Organization of Space	Organization of People: No Division	Organization of People: Partial Division	Organization of People: Division
Division	Single Family (Home)		Doctor's Office
Partial Division		Country Inn	
No Division	Church Basement		(One-Room Schoolhouse)

erating independently during the program day. Staff assesses participants' abilities and, based on their level of capability, assigns them to a room and program, much as medical facility staff assess patient's symptoms and assign them to exam rooms, accordingly. Based on its subdivision into multiple small spaces (connected by corridors), Midcity represents a Doctor's Office ADC type. Diaz Moore suggests this leads to "disorientation and disconnection from others while simultaneously enforcing a . . . controlled milieu" (2000, 155).

Lake Park represents the middle ground between Church Basement ADCs and Doctor's Office ADCs. It occupies the central cell of our matrix, reflecting its partial division of both space and people. Lake Park ADC epitomizes the Country Inn ADC. Like its namesake, a country inn or a gracious bed-and-breakfast, Lake Park includes a mix of several large public and smaller spaces with varying degrees of separation (alcoves, interior windows, and French doors) from open areas. Program participants of a Country Inn ADC type are separated at different points throughout the program day, based on a variety of factors: interest in a particular activity, tolerance for varying levels of stimulation, or functional abilities.

Table 2.1 portrays the essence or core of ADCs as a product of people and space or of the socio-spatial relationship. It is important to note, however, that the decisions and actions of the operating organization determine the organization of people and space in a specific ADC. The social/spatial structure of table 2.1 considers people and the physical setting but fails to consider the program, which certainly plays a large role in shaping the place as a whole. Whether proactive or passive, conscious or not, these organizational decisions and actions indelibly influence an ADC as a place. The experiential consequences of these different patterns of social and spatial division will be considered in chapter 3.

3.

The Experiential Approach

Attributes of Place Experience

Hardly a day goes by that we don't find ourselves diagnosing and evaluating the personality attributes of the people with whom we have contact. We characterize some people as "pushy," others as "depressed," "withdrawn," or "exuberant." Such diagnoses tend to be immediate and global rather than analytical, and not always entirely accurate. The friend we thought to be depressed was simply struggling with a major career decision; the pattern of behavior we judged to be "pushy" turned out to reflect a different culture's norms about the appropriate distance to be maintained between two people engaged in conversation. Nevertheless, despite the possibility of misjudgment and stereotyping, we continue our efforts, not just to categorize but also to *understand* the people around us. If we are accurate, or even just lucky, our characterization of other people's personalities will help us understand and predict their attitudes and behavior.

We also sometimes try to categorize and understand the "personalities" of the *places* around us. Though places are all too often simply treated as a "background" variable and thus out of awareness, in some instances our experiences of places are as sharp and clearly drawn as our experiences of people: the "cozy" cabin where we had a meaningful family reunion; the "cold" and "institutional" hospital where we had surgery; "exciting" dance clubs; "lavish" resort hotels; a "depressing" nursing home. As with people, of course, our diagnoses are not always complete or completely accurate. We discover what we first thought of as a depressing nursing home to be staffed by warm and caring nurses; the dance club proves to be more snobbish than exciting. Such errors of judgment serve as constant reminders that multiple factors, including ourselves as well as the others that occupy or inhabit a place, shape our experience of that place.

Many of us also work hard to shape the character of the places most important to us, especially the settings where we live and work. Depending on our values, we try to make our home "inviting" or "imposing," "modest" or "monumental." Our efforts are multipronged. We choose the style of furnishings, the colors and fabrics, the personal items (photos, art work, and travel mementos) to be displayed. All of these elements together influence how our homes are experienced by others. In addition, the ways in which we present ourselves to others in our homes—our attitudes and behavior—

play a major role in shaping the personality others attribute to our place of residence.

When it comes to our places of work, however, it is difficult to take an equally strong hand in shaping the experience. We do not always have, or believe we have, the requisite resources and authority. Sometimes organizational policies work against us: regulations may prohibit tacking posters on the walls or bringing a favorite rug or easy chair into the office. Budgets are usually tight, and funds may not be available for an "extreme makeover." Other obstacles to shaping the experiential qualities of our workplaces may be more procedural or even conceptual. We may not have a strategy or *process* for equitably balancing our preferences and desires with those of our co-workers: What kind of process should we follow to ensure that everyone's opinion is heard and respected? Some of us may lack the *substantive knowledge* to design or redesign a workspace; we may have little sense of what constitutes an optimum environment for conducting intake interviews, engaging elders in activity therapy, or reminiscence. Finally, what *vocabulary* should we employ to describe the experiential qualities of the place we wish to create?

As they do in all settings, these challenges loom large in adult day centers, and perhaps more so because ADCs represent an emerging place type. Subsequent chapters will address many of these substantive and procedural questions; in particular, process issues will be considered in chapter 6 and substantive concerns in chapters 8 and 9. In this chapter we describe a vocabulary that can capture the essence of place experience in ADCs. Without commonly held terminology, it is very difficult to discuss the experiential strengths and weaknesses of existing ADCs or the qualities desired in a new one.

A Vocabulary of Place Experience

Over the years, psychologists have devoted an enormous amount of research to the study of personality types. Cattell (1957) identified sixteen key traits or attributes, ranging from "outgoing to reserved" and from "trusting to suspicious"; they clustered in various ways to shape an individual's overall personality. More recently Costa and McCrea (1992) have suggested that personalities can be defined according to five basic traits: openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Is it possible to type place (rather than people) according to traits or attributes and by so doing describe these place attributes and traits as "personality"? Can some collection of attributes help explain the experiential differences between a "warm and inviting" ADC and an "institutional," "aloof," or "overstimulating one?"

Perhaps because our environment (social and organizational as well as physical) is—for most of us most of the time—a "hidden dimension" that is out of our conscious awareness (Hall 1966), there has been far less study of the traits and attributes of places than of people. Nevertheless, a modest but still useful research literature focused on those attributes that shape place experience, which can be said to constitute its personality. Before turning to this supporting literature, however, it may be helpful to revisit the three prototypical ADCs introduced in chapter 1: Lord's Way, Midcity, and Lake Park.

They provide a vivid, immediate imagery for subsequent analyses of the personalities of ADCs.

Lord's Way

The attributes of ADCs such as Lord's Way, the prototypical church basement, present their occupants (program participants and staff) with a somewhat mixed set of experiences. Housed as they are in religious facilities, such ADCs tend to feel both familiar and positive. Many people have good memories of events—wedding receptions and Boy Scout pancake breakfasts—held in the typical religious social hall. Yet when serving as ADCs, such spaces may feel less festive, less full of life and people than we remember. With well over 2,000 square feet for an average daily census of twenty participants, Lord's Way exceeds national space standards for ADCs. Paradoxically, Lord's Way can feel more "crowded" than "spacious": because its spatial structure is a single large space, one can never really escape the presence of others.

Although the open space is well suited for singing and dancing, it is not as well suited for quieter activities—discussion of current events or reminiscence of past events. Auditory over-stimulation resulting from the large volume and hard wall surfaces in these spaces, and in conjunction with age-related hearing loss and dementia-induced attentional deficits, can make it quite difficult to carry on a conversation, even when those conversing sit a mere table's width away from each other.

ADCs such as Lord's Way may cause participants to feel some loss of privacy. The central location of bathrooms makes it easy for others to take note of when and how often one makes use of them. This can be especially embarrassing for participants suffering a loss of continence. Similarly, if anyone feels the need for even a brief after-lunch nap, there are no out-of-the-way corners in which to enjoy a modicum of privacy. Counterbalancing this reduction in privacy is the reassurance that some participants have in knowing they can always see a staff member; staff members, in turn, view it as important to have participants within their gaze at all times

The physical setting of Lord's Way can compromise programmatic objectives. Staff members find the inability to sustain at least two concurrent activities frustrating and must attempt to create activities that all twenty participants might find enjoyable and engaging. While ADC staff may be periodically tempted to seek another location in which to operate the ADC, the ties that bind the ADC to the religious organization remain strong. A substantial minority of ADC participants are currently or were active parishioners, and as a ministry supported by the church, the church often wants to keep Lord's Way close to home.

Core Diagnostic Pattern

Lord's Way exemplifies the Church Basement pattern. Among adult day centers, this is the most common pattern. Diaz Moore (2000) characterizes the church basement as a large, undifferentiated space, with limited and uniform environmental stimulation, where participants congregate in a large group and visual access is unfettered. While unlimited visual access can enhance participant safety, the environment compromises program control. More-

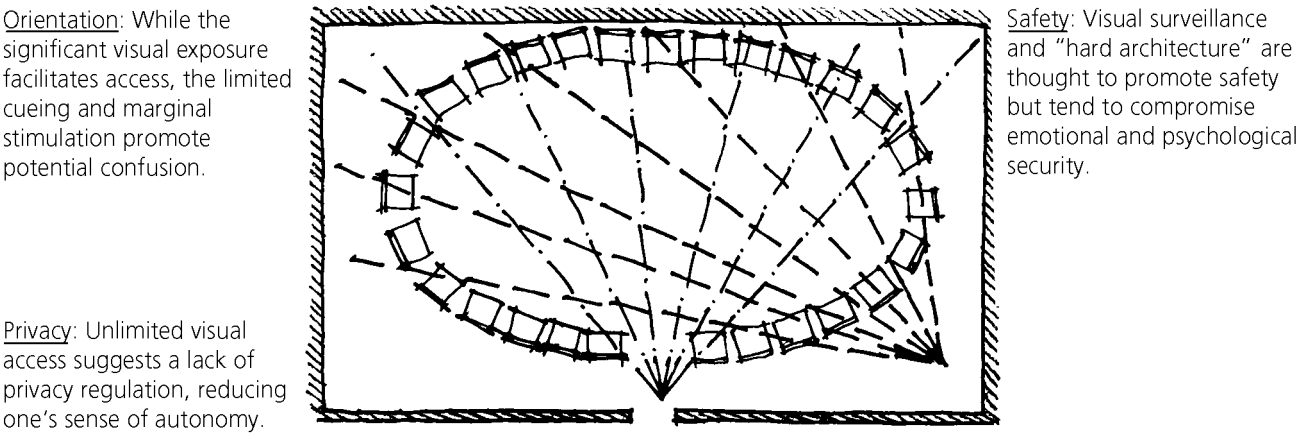

Orientation: While the significant visual exposure facilitates access, the limited cueing and marginal stimulation promote potential confusion.
Safety: Visual surveillance and "hard architecture" are thought to promote safety but tend to compromise emotional and psychological security.
Privacy: Unlimited visual access suggests a lack of privacy regulation, reducing one's sense of autonomy.

Figure 3.1. *Diagram of the Church Basement Pattern*

over, participants are unable to regulate their privacy, moderate stimulation exposure, or exercise choice. Such a situation compromises staff's abilities as well; such settings reduce improvisation in response to individualized need and the capacity to effectively conduct simultaneous activities. Although complete visual exposure coercively encourages adherence to the status quo, the marginal cueing makes it difficult for clients with a short attention span and compromised cognition to understand the purpose of the place. The safe route is to sit and be quiet—to socially withdraw. The proactive route may be to exhibit signs of agitation or growing anxiety. The programmatic intentions of Lord's Way notwithstanding, the poor fit between the program and the physical setting may produce negative outcomes (figure 3.1).

Midcity ADC

If Lord's Way feels open and sometimes hectic, Midcity ADC—not so different from a suite of doctors' offices—can feel confusing. It is not easy to gain a sense of Midcity as a whole because its fifty-five participants are subdivided into six groups, each group accorded its own space(s). Doors to the multiple program spaces typically remain closed during the day; often the only people visible are those moving through the corridors on their way to the centrally located bathrooms.

Like Lord's Way, Midcity occupies space initially built for a different purpose, in this case a commercial/light industrial building. And like Lord's Way, the existing space, even after remodeling, imposes some constraints. Because the building is roughly square, a number of rooms, and all of the corridors, are interior and without access to daylight or outside views. As a consequence, participants as well as staff characterize Midcity as "dark," "claustrophobic," and monotonous.

Rooms accessed from interior corridors also lend a sense of spatial disorientation to Midcity. The corridors look very much alike, and without any distinctive features such as pictures on the walls, a grandfather's clock, or other landmarks, it is difficult to discern important destinations such as the bathrooms.

Finally, because the available program spaces vary substantially in size, and because competence levels of participants inevitably change over time, it is not always possible to maintain a good "fit" between group size and room size. At times the largest program space has but a handful of participants while

the smallest spaces feel overcrowded. While the staff has concluded that reassignments of groups to other spaces would be disruptive of the sense of "continuity" they try to create, they recognize the limitations of their current situation. For example, participants who spend an entire day together in a single room sometimes experience and complain of "cabin fever."

Core Diagnostic Pattern

We refer to the core diagnostic pattern at Midcity ADC as the Doctor's Office; it comprises a series of barely distinguishable rooms whose activities are completely discrete from one another, linked by a monotonous, circuitous circulation system that is largely internalized, placing a high demand on orientation abilities. In a Doctor's Office, the doctor and nurse diagnose and care for a specific (isolated) patient. In Midcity ADC's program spaces, or "treatment rooms," participants and staff become isolated and disoriented from the outside world. Within the treatment spaces themselves, certain characteristics of the Church Basement reappear: undifferentiated space, with uniform stimulation, where visual access is unfettered.

Lake Park ADC

Unlike Lord's Way and Midcity, Lake Park ADC is a purpose-built facility. Lake Park staff members took the planning and design of their new facility very seriously, visiting a dozen ADCs, endeavoring to learn lessons from each. Lake Park's facility reflects these efforts.

Lake Park "feels" very different from either Lord's Way or Midcity. Neither as hectic as the former nor as subdued as the latter, Lake Park confers a sense of hospitality or graciousness that one might associate with a bed-and-breakfast or country inn. Situated adjacent to a wooded public park, Lake Park feels as if it is in the country; its large windows yield soothing views of nature. Due to careful planning and design, Lake Park tends to be light-filled yet glare-free. A grove of trees diffuses the midday sun, and translucent shades control the daylight entering through the skylights at the center of the main program space. Internal windows that link the central space to the beauty shop and living room further distribute daylight.

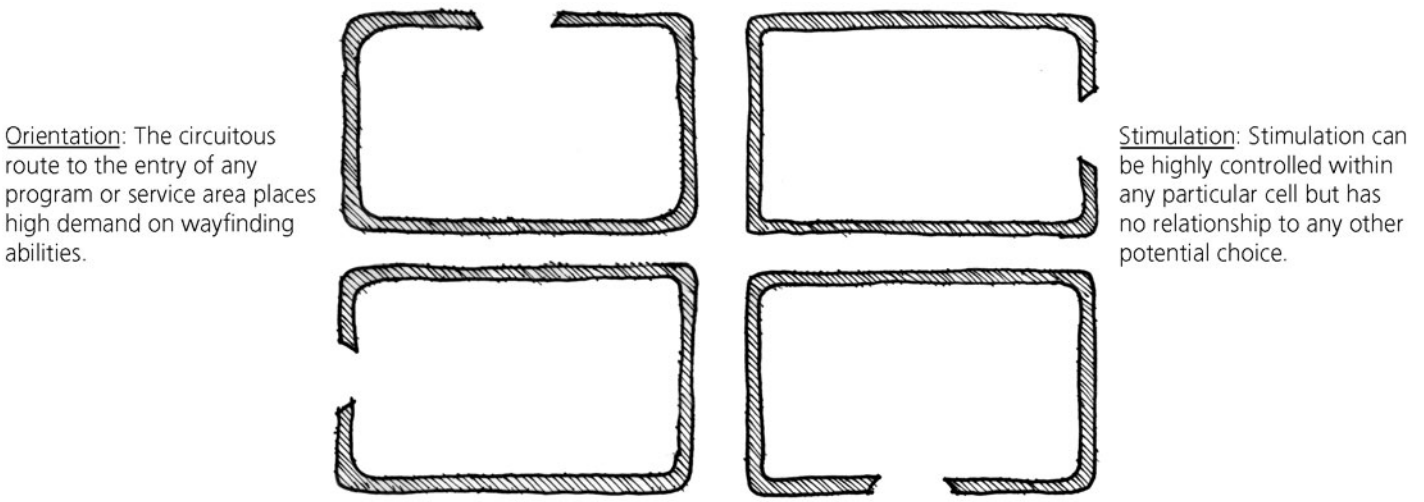

Orientation: The circuitous route to the entry of any program or service area places high demand on wayfinding abilities.
Stimulation: Stimulation can be highly controlled within any particular cell but has no relationship to any other potential choice.

Figure 3.2. *Diagram of the Doctor's Office Pattern*

Lake Park feels more "home-like" than the other ADCs. Finishes and furnishings are more domestic and natural than institutional in character. Chairs are wooden Windsor-style rather than the stackable metal and vinyl ones that seem to be an ADC standard. "Wood-look" flooring also contributes to the homey feel of Lake Park as does the wood trim around doors and windows, cloth tablecloths, and the carefully framed artwork—much of it by Lake Park participants—mounted on the walls.

Lake Park conveys the strong impression that participants can exercise choice. Staff believe it is very important to allow participants to select from among at least three different activities, each accommodated in a distinct space. At lunch, a participant can choose to eat in one of four locations—the dining room, breakfast bar, breakfast room, or kitchen counter—depending on how much social and sensory stimulation is desired or can be tolerated. The dining room, where most participants take their meals, offers two- and four-person tables. Finally, secure outdoor space allows participants the freedom to move in and out of the building as they please.

Core Diagnostic Pattern

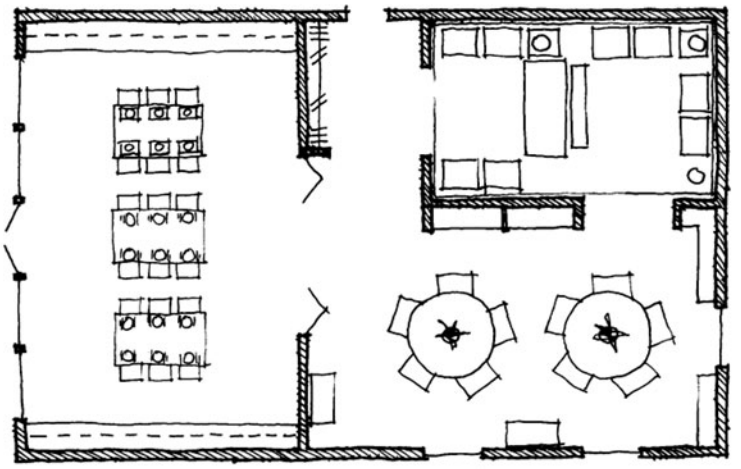
The Country Inn pattern of Lake Park ADC is meant to convey an environment which creates a comforting, relaxed social environment in which choices are provided, are clearly accessible, and are meaningfully cued and in which the activities that occur within each setting fit the character and cueing of the setting. Such a design is relaxing in that it empowers participants to make choices regarding activity and setting with which they are most comfortable. Providing visual access through internal and external windows and French doors enhances one's sense of options and connection with others. Settings are appropriately scaled and are organized in a manner that encourages propinquity and thereby promotes social interaction (figure 3.3). What drives this solution is the desire to create opportunities for participants to find their own place, to achieve a fit between their needs and desires and the provisions of program and setting. Because of the arrangement described above, both participants and staff are more apt to find meaningful opportunities for redirection so as to enable therapeutic experiences. Fit is furthered through the provision of options; and as one's competence is compromised, the issue of environmental fit becomes increasingly salient due to the lowered ability to adapt.

Attributes of Place Experience

One challenge, as noted earlier, is to find or create an effective vocabulary—a common language—for capturing and communicating experience of places. Finding the right words to adequately encapsulate the experience of these places is not a simple task. Luckily, however, some useful research, carried out by a number of leading environmental gerontologists, provides guidance in this important task. Lawton, Fulcomer, & Kleban (1984), speak of "evaluative criteria"; Calkins (1988), of "environment-behavior issues"; Cohen & Weisman (1991), of "therapeutic goals"; and Zeisel, Hyde, & Levkoff (1994), of "environmental characteristics." Despite the terminological differences, however, the authors all identify six to eight concerns, such as spatial and temporal orientation, social interaction, privacy, safety, and secu-

Orientation: Providing activity-space options that are visible to one another promotes choice.

Social Interaction: Variety in size and appointment of areas facilitates finding a place in which one may feel most comfortable to socially interact.



Stimulation: Stimulation can be largely controlled within any particular area, but choice among different stimulation levels is promoted.

Figure 3.3. *Diagram of the Country Inn Pattern*

rity, that are significant in environments for the elderly and cognitively impaired (Calkins & Weisman 1999; Lyman 1993). Each of the concerns is clearly a product of the interaction of people and environment. We call these concepts "attributes of place experience." We call them "attributes" because they are qualities we *attribute* to places on the basis of our own history, goals, and identity. For example, our attribution of "comfort" to a chair is as much dependent on our own personal dimensions and padding as those of the chair. Similarly, attribution of "privacy" to a place is as much a consequence of intentions as it is the physical setting.

This attribute approach to understanding experience is complementary to the modality view of experience found in psychology, where experience is divided into process stages—typically, perception, cognition, action, affect, and meaning. Both modalities and attributes of place experience provide a different perspective on the essential yet fundamentally arbitrary task of dividing up our holistic experience of places (figure 3.4). By way of example, consider one such attribute of positive place experience, legibility, which is defined as the sense of being spatially and temporally oriented within one's environment. The experience of a place as legible or illegible requires per-

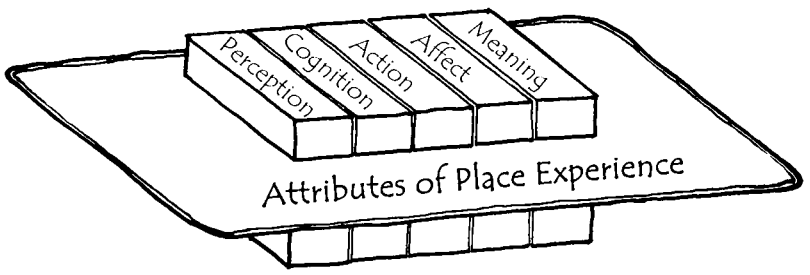


Figure 3.4. *Rather than sequencing experience into modalities (perception, cognition, action, affect, and meaning), place experience may be viewed as involving all of the modalities. From R. L. Rubinstein, M. Moss, and M. H. Kleban, eds.,* The Many Dimensions of Aging *(New York: Springer, 2000); used by permission of the publisher;* © *2000 Springer Publishing Co., Inc.*

ception of one's surroundings (corridors, signs, views through windows); organizing those percepts into a coherent cognition ("I think this building is L-shaped"); formulating a plan of action ("I'll need to turn right at the next intersection to get to the men's room"); emotion ("This is too confusing"); and attribution of meaning ("What an awful day center").

Experiencing ADCs

Following the experiential attribute approach, we will employ eleven attributes of place experience as the common vocabulary for our analyses of ADCs (in terms of diagnostic patterns), and our recommendations for the design of ADCs (in terms of prescriptive patterns) (figure 3.5). These attributes, framed as questions and ordered from the most concrete to the most abstract, are:

(1) Does the environment provide a sense of *safety and security*?
(2) Does the environment facilitate *functional independence*?
(3) Does the environment facilitate spatial, temporal and social *orientation*?
(4) Does the environment offer quality *sensory stimulation*?
(5) Does the environment provide opportunities for *meaningful activity*?
(6) Does the environment provide opportunities for *social interaction*?
(7) Does the environment afford a sense of *privacy*?
(8) Does the environment provide ADC participants opportunities for *personal control*?
(9) Does the environment support *continuity of the self*?
(10) Does the environment provide opportunities for *spirituality*?
(11) Does the environment afford *architectural delight*?

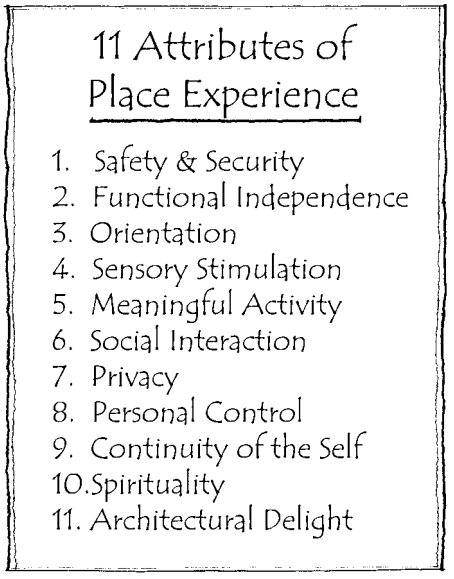


Figure 3.5. *Eleven Attributes of Place Experience*

While the experience of places could be analyzed in other ways, this set of eleven (overlapping rather than discrete) attributes is the most effective. Substantial evidence supports our position that under most circumstances most of us prefer privacy to its absence, social interaction to isolation, and independence rather than dependence in performing tasks of daily living (Cohen & Weisman 1991; Teresi, Lawton, Ory, & Holmes 1994; Windley & Scheidt 1980).

Safety and Security

This first attribute echoes Florence Nightingale's injunction to above all else do no harm to those in one's care. Of primary concern is physical safety and sense of psychological security on the part of participants, staff, and families. Safety and security issues loom large in the minds of everyone involved in ADCs and are clearly addressed by each of our three representative ADCs. Each has taken care to provide adequate lighting, handrails, and grab bars, and to ensure that there are no loose area rugs, uneven floor surfaces, exposed power cords, or sharp corners and edges. Likely less obvious but equally important are secure storage for both medications and cleaning agents, safe and secure outdoor spaces, provision of toilet stalls large enough to allow for staff assistance in transfers, and monitored exits. Only Lake Park, by virtue of its setting, is able to provide a freely accessible, secure outdoor area. The floor plan of Midcity makes it difficult for staff to observe the emergency exits.

One of the challenges in ADC planning and design is to ensure that safety and security, as important as it is, does not "trump" other considerations.

Functional Independence

Given the progressive and debilitating nature of Alzheimer disease, it is all too easy to dwell on the increasing number of tasks its victims can no longer perform. It is essential to overcome this natural tendency to focus on lost capacities. Instead, the focus must be on, and the environment must support, opportunities for every ADC participant to continue to exercise his or her remaining capacities and maintain a sense of independence. Abilities that are not exercised will atrophy over time. To prevent atrophic deterioration, the environment must support maintenance of functional abilities in ways both large and small.

The ability to toilet oneself is a core personal function influenced by the physical setting of the ADC. At Lord's Way, all the toilets are located at one end of its 70-foot-plus space; however, the visibility of the toilet rooms enhances participants' awareness of them. Conversely, at Midcity, the centrally located toilet rooms are significantly closer to the program spaces but because they are "down the hall and around the corner," Midcity's toilet rooms are judged to be somewhat inaccessible, a situation that is especially problematic for incontinent participants.

Orientation

Both Lord's Way and Lake Park ADCs support a participant's sense of where he or she is. From almost any location in the place, the entire setting is within

one's visual field; this quality eliminates the cognitive demand of having to remember the relative locations of currently not-visible destinations. Lake Park took this strategy a step further through the innovative inclusion of interior windows and vision panels in doors; toilet rooms at Lake Park are likewise in visible locations, though not overly and awkwardly prominent as they tend to be at Lord's Way. By comparison, at Midcity ADC the network of corridors, limited visual field, and absence of visual differentiation make it more difficult to maintain a sense of one's current location and how to make one's way to desired destinations (figure 3.6).

Throughout most of our lives we find ourselves in spaces closely associated with the specific activities that take place within them. We take our meals in a dining room after preparing them in a kitchen. We entertain friends in the more public realms of our home such as a living or family room; we sleep in the bedroom, the most private realm of a home. Thus we can think of the physical setting—including the furnishings and associated props that differentiate each of these spaces—as a visual mnemonic, providing cues to what kinds of activities are "supposed" to occur there (Küller 1991). In many ADCs, however—Lord's Way, for example—the associations between space and activity are lost because diverse activities must all take place in the same space. With this sort of environmental generalization, the role of environment as mnemonic with the potential to compensate for memory impairment is lost.

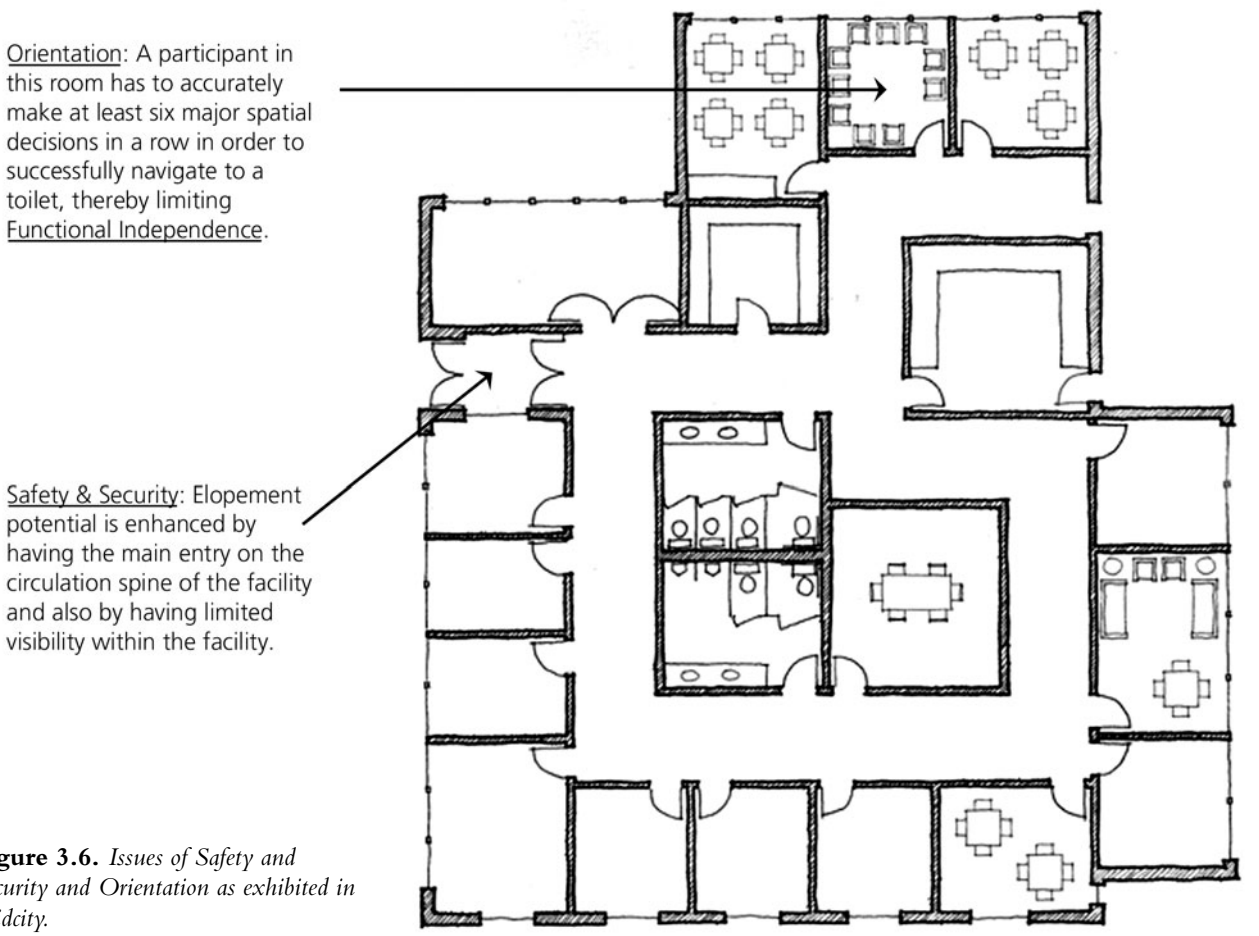

Orientation: A participant in this room has to accurately make at least six major spatial decisions in a row in order to successfully navigate to a toilet, thereby limiting Functional Independence.
Safety & Security: Elopement potential is enhanced by having the main entry on the circulation spine of the facility and also by having limited visibility within the facility.

Figure 3.6. *Issues of Safety and Security and Orientation as exhibited in Midcity.*

Sensory Stimulation

Experience of a place is surely affected by the ways in which it stimulates our senses. Think of an ADC suffused with the smell of freshly baked cookies as opposed to one redolent of an unpleasant disinfectant. Paradoxically, many care settings for the elderly provide too little and too much sensory stimulation all at the same time! To the extent possible, each of our representative ADCs has endeavored to strike a balance in the quantity and quality of sensory stimulation they afford their occupants. Lord's Way hung thick draperies along one wall to gain control of reverberation from hard wall and ceiling surfaces as well as to mask the hum of heating and ventilating equipment, since both echoes and background noise can negatively affect the intelligibility of speech. Midcity found it necessary to install double glazed windows to minimize the ambient street noise from an active neighborhood. In their effort to minimize visual stimulation, blinds and draperies at Midcity remain closed. In contrast, Lake Park has done everything it can to allow light into their space and afford views. Given the need of most elders for enhanced illumination (three times as much as the average 20-year-old person), it is essential to elevate lighting levels while maintaining control of glare.

Meaningful Activities

All three of our representative ADCs work hard to provide their participants with personally meaningful activities. Our position on this topic is consistent with that of Zgola (1999), who characterizes activity as meaningful if it has an obvious and acceptable purpose, is done voluntarily, provides pleasure, is socially appropriate, and is failure-proof. The current generation of elders—witnesses to the Great Depression and the Second World War—tend to be work oriented. Stuffing envelopes, setting and clearing tables, arranging chairs for a concert, for example, are likely to be more familiar and more engaging than leisurely (and often childlike) board games, coloring with crayons, or birthday parties.

Social Interaction

Experience of the personality of a place is shaped to a considerable extent by the level of activity, particularly social activity. At Lake Park some participants engage in small group activities, while others engage in activities by themselves or with one or two others; some will participate in an organized discussion (reminiscing about past homes or favorite stories about work), while others simply chat as they fold napkins or put away tableware. Taken as a whole, Lake Park is a place where participants actively engage with one another, a place with an ongoing and satisfying social life. Lord's Way and Midcity, by contrast, provide a less engaging experience for participants. Lord's Way is housed in a single large space, which makes it difficult to sustain multiple ongoing activities and conversations. To facilitate concurrent group activities, staff conduct one adjacent to the kitchen and the other in the half-circle of chairs at the other end of the room. The distance between the two activities is close enough that members of each group, concerned with not disturbing the other, tend to keep their voices low; this sometimes

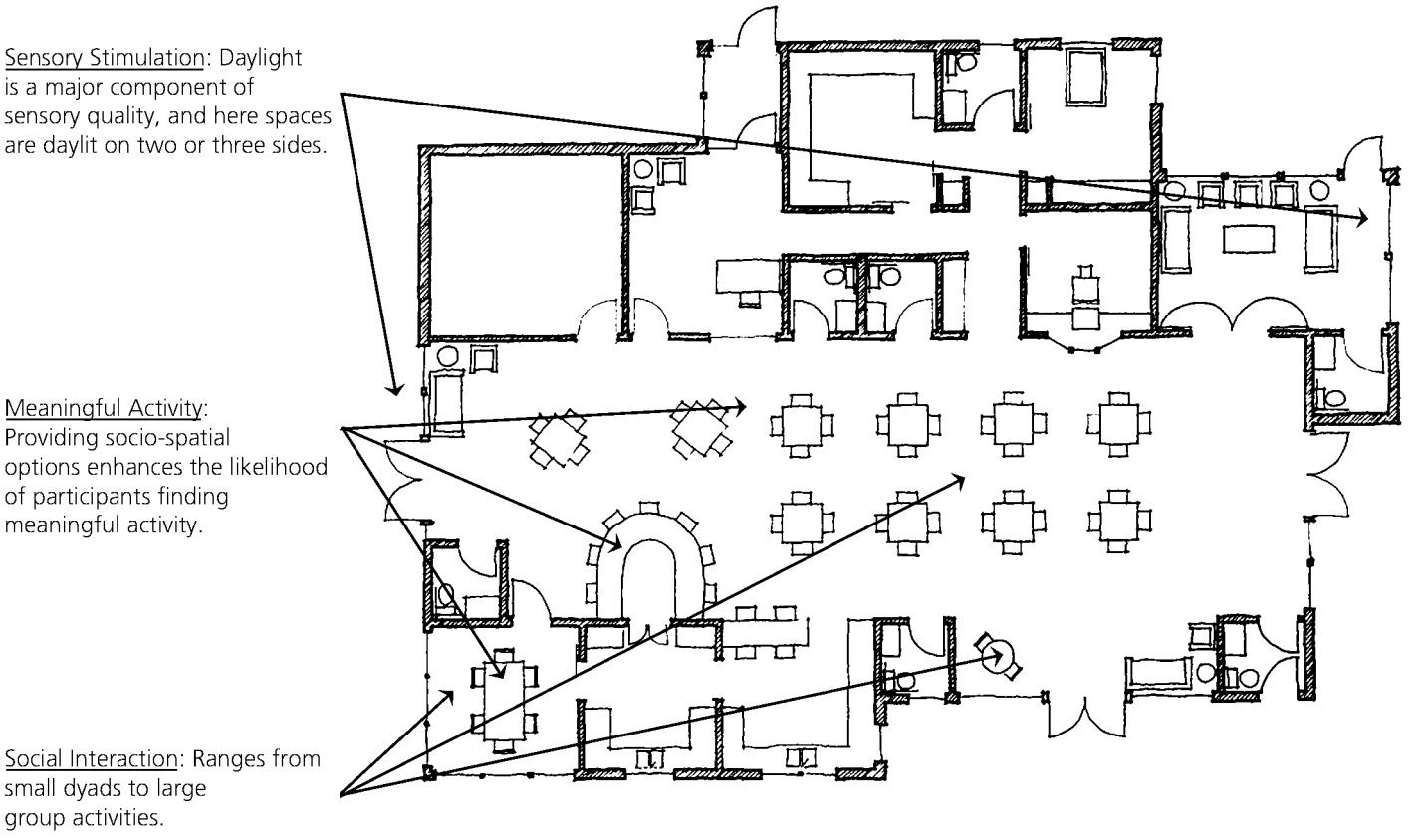

Sensory Stimulation: Daylight is a major component of sensory quality, and here spaces are daylit on two or three sides.
Meaningful Activity: Providing socio-spatial options enhances the likelihood of participants finding meaningful activity.
Social Interaction: Ranges from small dyads to large group activities.

Figure 3.7. *Issues of Sensory Stimulation, Meaningful Activity, and Social Interaction as found in Lake Park.*

constrains the liveliness of the conversation and makes it difficult to hear. At Midcity, where activity space is divided into six separate rooms with varying numbers of participants occupying each of these rooms, the social atmosphere ranges from quiet to lively.

Privacy

Privacy (or its absence) is among the most familiar and well-understood attributes of place experience, and it can be defined in several distinct ways. Sometimes we choose to isolate ourselves from others to obtain solitude. This form of privacy is difficult to achieve at Lord's Way, where the single large space makes such solitude problematic. At Midcity and Lake Park, multiple separate spaces provide participants the solitude form of privacy. On other occasions we may wish to remain on the periphery of an activity, as more of an observer than an active participant. Only Lake Park, with its nooks and corners, can readily afford this kind of vicarious, or passive, participation. Finally, privacy may be conceived of in terms of deflecting unwanted stimulation impinging from the larger environment. At Lord's Way, where the entry opens directly into the main program space, the comings and goings of other participants sometimes violate this type of privacy. Air lock vestibules at Midcity and Lake Park tend to buffer the comings and goings of others.

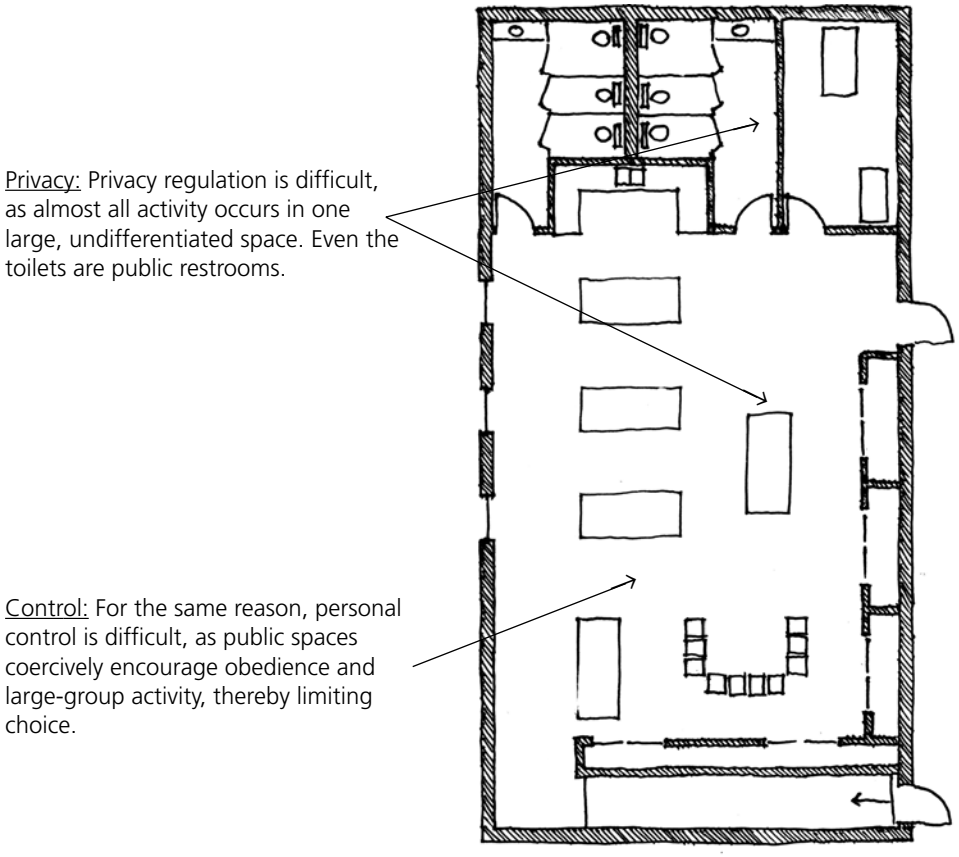

Privacy: Privacy regulation is difficult, as almost all activity occurs in one large, undifferentiated space. Even the toilets are public restrooms.
Control: For the same reason, personal control is difficult, as public spaces coercively encourage obedience and large-group activity, thereby limiting choice.

Figure 3.8. *Issues of Privacy and Control as found in Lord's Way.*

Personal Control

The extent to which a place affords a sense of control is clearly a product of policies and program as well as the physical setting. Thus, while both Midcity and Lake Park stage multiple concurrent activities most of the time, only Lake Park gives participants a *choice* among activities in which they can engage. By virtue of its multiple spaces, Lake Park extends more choice to participants, who can choose paths for traversing the building, places to sit, and places to talk. Lord's Way, by contrast, barely has enough seating for everyone on days when the census is high. To compensate for some of its choice limitations related to space, Lord's Way provides a number of table lamps, fans, and sweaters for anyone who needs to adjust their luminous or thermal environment.

Continuity of the Self

As noted in our discussion of the attribute of functional independence, places may be experienced as more or less familiar. To foster familiarity, a place can provide prompts or mnemonics, enhancing a sense of comfort and reminding us of what constitutes appropriate or inappropriate behavior. The residential furnishings—sofas, coffee table, end tables—in several of Midcity's program spaces suggest that these are appropriate settings for informal conversation. Similarly, in an effort to overcome its somewhat institutional basement character, Lord's Way staff members have gathered, framed, and

mounted on the corridor walls, photos of participants' former homes. These photos provide a measure of visual stimulation and forge a link to participants' past lives.

Familiar activities such as cooking, sewing, and gardening can likewise contribute to continuity of self. The horseshoe breakfast bar at Lake Park, the first stop for many participants upon their arrival in the morning, was purposefully designed to evoke memories of a neighborhood café that participants may have frequented in past years. Raised flower beds bordering the patio, a potting table, and an abundance of sunlight light make it possible for participants to garden; plants cultivated by participants can then be brought into the building. At Lord's Way, the basement location means that gardening is not an option. However, the recent donation of two sewing machines provides participants with a different sense of connection to their past lives.

Spirituality

Although many ADCs, like Lord's Way, have a religious affiliation, relatively few of them possess a spiritual quality. While overt religious artifacts or symbols may be appropriate when a sponsoring organization and participants share a religious orientation, other strategies—though ostensibly secular—might be equally effective in evoking a spiritual quality. These might include a window that artfully frames a view of a garden or specimen tree; a quiet corner (perhaps enhanced by a skylight) for meditation; or a miniature Zen garden.

Architectural Delight

Constraints of budget, site, and function will preclude most ADCs from representing "high architecture." Nevertheless, even simple retrofits of existing spaces can enhance visual and spatial quality. Plants and other living things enrich the character and quality of a place. Partial walls and internal windows of the kind found at Lake Park can extend one's sense of a space, promising something new around a corner.

Conclusion

Like the analysis of the social/spatial structure of ADCs presented in chapter 2, this chapter's analysis of attributes of place experience is but one way of looking at and coming to understand ADCs. A single approach, by itself, is inadequate. We have already begun to see how spatial structure such as the single undivided space at Lord's Way has consequences for attributes of experience such as privacy and social interaction. Though we have not yet dealt explicitly with more detailed aspects of the physical setting—for example, means of illumination, finishes and furnishings, or even tableware and dinnerware—these environmental elements can likewise affect our experience of a place. In the following chapter, we will consider additional factors and explain how they come together in systemic, coherent, and patterned ways to shape the character of ADCs.

4.

ADCs, Places, and Systems

As outlined in the Introduction, places consist of three components: people, program, and the physical setting. Place experience is the outcome of the interplay among the components. These fairly abstract concepts could benefit from some substance and imagery, and thus we turn again to our three character ADCs.

While Lake Park was purpose-built, it is important to recognize that none of the three prototypical ADCs emerged by coincidence: Midcity, Lord's Way, and Lake Park are each the result of a set of organizational intentions. These intentions manifest themselves in an activity program, which in turn generates the architectural program, the summary document upon which the architectural design is based. Typically, an activity program is a detailed, sometimes minute-by-minute list of what ADC participants and staff are going to be doing, with whom, when, where, and with what sorts of equipment or props. Because the customary ADC activity program is so comprehensive, it plays a major role in shaping the physical setting. Thus, as an ADC (a place) comes together, or is "constructed," the program becomes the "link" between people (participants, care professionals, etc.) and the physical setting. In essence, the people, the program, and the physical setting are the three fundamental components of an ADC, and the compatibility or coherence between these three components has a substantial impact on the relative success of each component and on the place as a whole. A successful place is one where there is a relatively high degree of coherence among its components. In our efforts to analyze and understand places, we have concentrated on seeking out and identifying particularly effective sets of compatible relations—each a pattern—between the three components of place.

Lord's Way, Midcity, and Lake Park all share the same organizational goal of offering multiple concurrent activities to their clients. However, the means that each ADC employs to achieve this goal vary dramatically. Lake Park was explicitly designed to afford participants exposure to, and choice among, two or three different activities. Its main program space, as we learned in chapter 2, is subdivided into a number of smaller areas; movable partitions and internal windows all make it possible for a limited number of staff to maintain unobtrusive visual access to all areas. Tables, mostly square four-tops, can be combined in various ways to accommodate both large and small groups. Lighting is adjustable to accommodate diverse activities. In short, multiple design decisions—ranging from configuration of space to de-

tails of illumination and furnishings—ensure compatibility among the people, the program, and the physical setting at Lake Park

Midcity's facility, though not purpose-built, required substantial renovation in order to achieve a degree of compatibility among its people, program, and physical setting. Highly subdivided spatially, its six program spaces accommodate four sets of participants, grouped in terms of level of cognitive impairment. These spaces are all discrete; none are interconnected as at Lake Park. However, given Midcity's organizational prescription that has participants spending their days exclusively with the other members of their group in their specified space, the absence of the kind of spatial connections found at Lake Park is consistent with Midcity's intended program: the people, program, and physical setting are compatible. Though their goals and means differ, both Lake Park and Midcity have achieved coherence between their respective components of place.

Lord's Way, by contrast, has a much lower degree of compatibility between the place components, which makes for a less satisfying experience. On the one hand, the nature of the spatially undivided space allows for two concurrent activities, one in the kitchen area and a second in the seating area at the opposite end of the room. However—recall the issues of privacy and sensory stimulation reviewed in chapter 3—both participant groups must constrain their level of activity lest one group distract the other. Lord's Way staff must compensate socially and programmatically to avoid distraction of participants, something the other two ADCs can accomplish at least in part through their physical settings. At Midcity and Lake Park, spatial divisions serve to control sensory conditions; and walls, dividers, and alcoves all limit the experience of visual and auditory distraction.

A Model of Place

Analysis of character settings affords a feel for the myriad factors that come into play in an ADC. How can these diverse pieces—organizational goals, the necessity of keeping an eye on participants, the need to balance privacy and social interaction, spatial subdivision, and so on—be knitted together into one coherent and useful framework or conceptual model? Researchers in environmental gerontology have provided us with a solid foundation for developing a coherent approach. Lawton (1971, 1982) defines the environment in terms of the following dimensions: individual, personal, and suprapersonal environment; social environment; physical environment; and person-environment interactions. Moos (1980), whose model mirrors Lawton's in many ways, includes four overlapping domains of the environment: the suprapersonal, program and policy, physical-architectural, and social climate.

Our own endeavors to create a conceptual model to guide ADC planning and research (Diaz Moore et al. 2001; Weisman 1997, 2001; Weisman, Chaudhury, & Diaz Moore 2000) build on these earlier efforts. The Model of Place that we have conceptualized consists of three components—people, program, and physical setting—with place experience as the outcome of their interaction (see figure I.1). Our *people* component encompasses Lawton's individual, personal, and suprapersonal environments. Moos's "program and policy" domain is captured in our concept of *program*. Finally, our concept of *place experience* encompasses what Lawton calls "person-environment interaction," as well as Moos's notion of "social climate."

Figure 4.1. *Three Levels of Aggregation in the People Component of Place*

More specifically, the *people* component of our Model of Place (figure 4.1) is composed of human beings at three levels of social aggregation: individual (the ADC participant); group (care professionals and families); and organization (the ADC as a formal organization).

The *physical setting* component of the model is defined in two complementary ways: in terms of systems and in terms of properties (figure 4.2). The setting, thought of in terms of building systems, can be defined in terms of structure and enclosure system (beams, columns, walls, and floors), mechanical systems (heating, lighting, and ventilation), and finishes and furnishings. One can also define the physical setting in terms of its sensory and spatial properties. Rooms in an ADC, for example, possess three spatial properties: the given area, a set of proportions (from square to long and narrow), and distance from other rooms. Similarly, any given room—by virtue of its lighting fixtures, heating and ventilation systems, and finishes—will provide particular levels of illumination, temperature, sound, and air movement. One of the challenges in thinking about places analytically is coming to understand the relationship between the components of the physical setting and the sensory and spatial properties it engenders.

The link between the people and the physical setting components is the *program*—the set of explicit and implicit (presumed) intentions to be accommodated in the place. In an ADC the primary intention is to provide a range of activities and services designed to support the needs of elderly and dementia participants (figure 4.3). The program is rooted in the mission and goals of the organization. What is the ADC trying to achieve? Does it in-

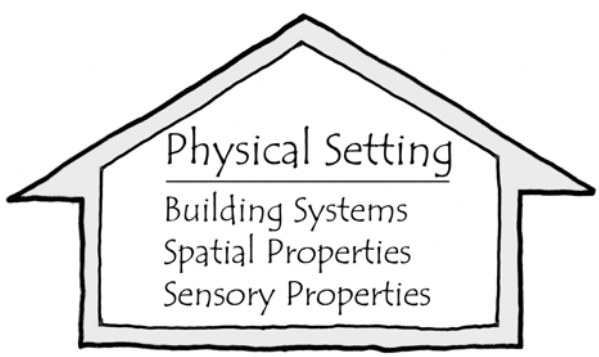


Figure 4.2. *Three Aspects of the Physical Setting Component of Place*

Figure 4.3. *The activities and services provided by an ADC, driven by underlying intentions, constitute the program component of place.*

tend to provide intensive medical services? Is it willing to offer care to participants whose functional abilities are severely compromised? These intentions become embedded in the activity program, which, as described earlier, specifies what activities are to occur, when, and with whom.

Throughout the process of defining the activity program, it is essential to consider the kind of experiential atmosphere that might support the intended activities; and in fact, this thought process is quite natural. What level of privacy is needed in a space where one interviews potential ADC participants and their families? To what extent do we wish to facilitate social interaction among participants, or support their abilities to engage in kitchen work? Consideration of such questions yields the underlying intentions regarding the desired experiential attributes of the ADC as a place.

These questions also inevitably highlight the interplay among people, the physical setting, and the program, for it is only through their transaction that such experiences are shaped. For instance, reflecting on appropriate experiential attributes can lead, again in a fairly natural way, to consideration of the physical conditions with the potential for producing the desired experiential atmosphere. Activities certainly take place somewhere, and that place can either facilitate or constrain the activity. What kinds of spaces accommodate the activities outlined in the activity program? How large ought these spaces to be, and what other spaces ought to be close to them (spatial properties)? What level of illumination and what temperature (sensory properties) are appropriate to the activities and capabilities of participants?

Similarly, consideration of place experience inevitably raises questions about the participants, the people for whom the activity is intended. What are the functional abilities required for the activity? Who would be interested in such an activity? Consideration of the experiences one seeks to engender demands attention to all three components of the Model of Place.

Thus, it should be no surprise that the final concept that lies at the heart of our Model of Place—or more accurately, the product of the interaction of the three components of place—is *place experience.* As noted previously, place experience includes but goes beyond overt behavior. What we see, think, and feel as well as what we do is integral to defining and understanding place experience. Our discussion of attributes of place experience in chapter 3 provides the raw material for considering this important experiential component throughout the development process. The key question to consider in evaluating ADCs is the degree of compatibility or fit between

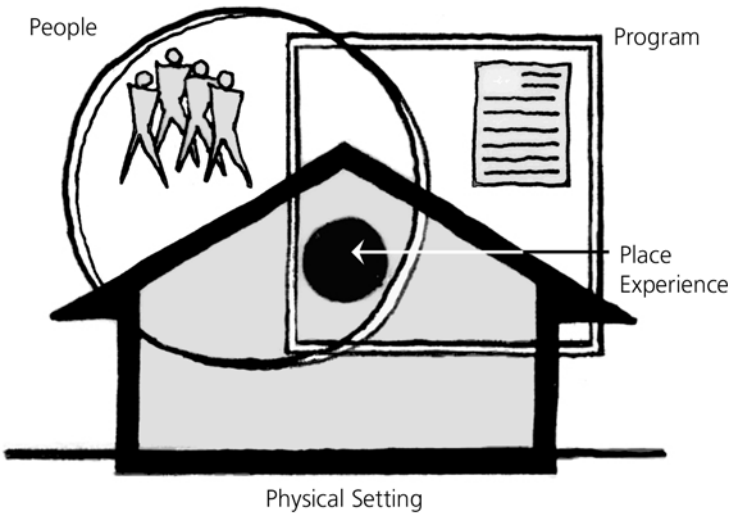


Figure 4.4. *Place experience is the product of the three components of place.*

goals enumerated in the program, the needs and desires of people, and the nature of the architectural reality of an ADC. In chapter 10 we return to the important relationship between intentions and reality that form the core of evaluations of ADCs.

The Placemaking Process

The intent of the Model of Place is to identify and include the essential components of any ADC and ascertain how they do or do not fit together successfully. However, what we have described so far is essentially a "static" model, reflective of an ADC at any one point in time. It is essential to also model how places, including ADCs, evolve over time. In short, we want our Model of Place to guide the planning, programming, design, and evaluation activities on which this guidebook is focused. One such model for the process of place making is provided in table 4.1.

The first five of the six rows of table 4.1 correspond to the basic components of our Model of Place. The top three rows—participants, staff, and organization—represent the People half of place. The fifth row represents the Physical Setting side of the equation. Linking People and Physical Setting is the highlighted row of Place Experience, which is reflective of the outcome of their interaction.

The six columns of table 4.1 reflect key steps in the process of creating an ADC: Preparation, Planning, Activity Programming, Architectural Programming, Design/Construction, Evaluation. The 30 cells thus defined (5 rows × 6 columns) contain the key tasks to be completed in the creation of an ADC. The sixth and final row defines specific documents to be completed at each step in the process. Thus the Preparation phase focuses on information gathering. This includes information regarding people—demographics, needs of the aging and cognitively impaired, alternative models of care—as well as physical setting information related to location, codes, and standards. This information gathering should coalesce in the form of a vision statement as described in chapter 5.

The Planning phase is a period of intense activity that produces multiple

Table 4.1. Placemaking Process Matrix

			Program Component of Model of Place			
	Preparation	*Planning*	*Activity Programming*	*Architectural Programming*	*Design/Consruction*	*Evaluation*
Elderly with Cognitive and Physical Impairments	Understand demographics of aging and dementia Recognize and understand age-related changes	Identify target population to be served Consider evolving needs of population	Develop profile of population to be served (functional, social, cultural)	Describe the desired therapeutic benefits of activities in terms of Attributes of Place Experience	Develop marketing Engage in advance "premarketing"	Have therapeutic goals been realized? Assess cognitive and functional abilities over time Assess strengths and weaknesses of facility as relates to participant experience
			People Component of Model of Place			
Staff	Review needs of the aging and people with dementia Review trends in ADS programming	Define tasks, roles, and teams	Strategize delivery of activity program	Describe the desired facility in terms of attributes of place experience and characteristics of place personality	Engage in staff training	Assess strengths and weaknesses of facility as relates to staff effectiveness Assess place satisfaction of families
Organization	Review alternative models of care Review/develop mission statement and philosophy of care Conduct feasibility studies. Determine facility size, staffing ratios, roles, services	Review comparables Define admission and discharge criteria Develop assessment/care plans Develop staff training program	Develop activity program Craft daily activity program in terms of desired attributes of place experience	List the environmental considerations for activities from the points of view of participants, family, staff, and organization	Develop participant agreement contracts Define and map organizational structure Create and record job descriptions, policies	Assess culture, absenteeism, turnover, census

			Place Experience Component of Model of Place			
Environment As Experienced	Identify and visit comparable facilities Develop vision statement	Identify experiential attributes embedded in the vision statement	Define patterns linking activity and desired experiential attributes to the physical setting		Make decisions with a focus on the place as a whole	Evaluate the degree to which desired attributes exist in the place
			Physical Setting Component of Model of Place			
Physical Environment	Define locational criteria Identify potential locations within community of facility Review relevant research Review relevant codes and standards	Begin to narrow down list of potential locations Develop construction and entire project budget parameters	Generate visual imagery about the place you aspire to create Collect images (photographs, etc.) that represent the desired place experience and reflect stylistic preferences and ADC "must haves"	Define desired relationships between spaces Define sensory and spatial properties for individual spaces Define furniture, equipment and finishes for individual spaces	Review schematics, final design, construction documents, and specifications	Does the facility provide desired attributes of experience? Does the facility provide desired sensory and spatial attributes? Does the facility provide desired furniture, finishes and equipment?
Benchmark Documents	Mission Statement Vision Statement	Pro Forma Market Feasibility	Activity Program	Patterns for Design Architectural Program	Construction Documents Policies & Procedures	Post-Occupancy Evaluation (POE)

essential products. This is the point at which both a philosophy and a model of care are articulated, the target population is identified, feasibility of the project is assessed, and social climate (attributes of place experience) is articulated. On the physical setting side, this is the point at which location options should be narrowed and budgets firmed up. The feasibility study, considered in detail in chapter 6, is the primary product of the Planning phase.

During Activity Programming, the broadly defined philosophy of care of the Planning phase is further defined in terms of the daily program. Admission and discharge criteria are developed at this point, as are procedures of participant assessment and staff training. On the architectural side, this is the point at which one begins to develop an image bank of photos and drawings that begin to capture the "personality" of the proposed ADC. Also, a design team can formulate the development of space planning modules based on the typical activities that are planned to occur. The activity program (see chapter 7) is the primary output of this phase.

With the transition from Activity to Architectural Programming comes a shift in emphasis from the People side of the equation to the Physical Setting. The Architectural Program will develop in detail a list of all the spaces to be included in the ADC and their requirements with respect to location, size, proportion, finishes and furnishing, and sensory conditions (lighting, temperature, sound levels, etc.). The architectural program is the primary output of this phase.

This translation process from activity program to architectural program is essential if the physical setting is to serve as a resource for the therapeutic intentions of the adult day service organization. All too often, the space requirements consist of a "laundry list" of space requirements that fails to capture the essential interplay among program, people, and physical setting that shapes the character of the resulting place. Table 4.1 suggests that activity and architectural programs can be developed through the development of "prescriptive patterns" that illustrate proven and effective ways of linking people, program, and setting in the service of a set of desired attributes of place experience. Chapters 8 and 9 present such patterns for the configuration of key spaces and activities such as entry and welcome, personal hygiene and toileting, and dining.

The Design/Construction phase involves follow-up detail work. On the organizational side, this includes marketing, staff recruitment and training, and finalizing of policies and procedures. On the architectural side, attention is directed toward finalizing design and construction decisions. Construction documents and policy and procedure manuals are to be completed during this phase.

The final, and critically important, phase of the ADC development process is Evaluation. Questions with respect to evaluation of the physical setting are relatively straightforward. Does the ADC provide the sensory and spatial properties, furnishings, and finishes specified in the architectural program? When we shift to the person side of the matrix, evaluation questions become increasingly challenging. Do patterns of use within the ADC follow those defined in the Activity Program? Are staff morale, absenteeism, and turnover at acceptable levels? Finally, and most fundamentally, does the ADC meet the organizational and therapeutic goals laid out in the vision

and mission statements? Chapter 10 introduces a 164-item questionnaire for evaluation of ADCs.

Conclusion

The intent of this chapter was to increase understanding of adult day services as places—places constituted of transactions among people, program, and physical setting. It was also intended as a bridge between the first and last parts of this book. While Part I developed awareness of existing adult day service settings, Part III focuses on how places can come to be, or the art of place making. Table 4.1 presents a schematic of the facility development process and links that process with our Model of Place. In so doing, it highlights the necessity of focusing on *all* the aspects of a place throughout the development process. What lies at the core of each step in the process lies at the core of our Model of Place: place experience. Staying focused on the experiential attributes of place allows planners, designers, programmers, and others to transcend the discrete realms of organizational policy and architectural enclosure; people, program, and physical setting can be seen as interrelated. An understanding of this interrelationship can result in the crafting of coherent ADCs, those most likely to engender quality experiences for participants and staff alike.

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PART III

Taking Action

This section focuses on the process of creating a place for adult day services, with an emphasis on tools for change useful to those individuals responsible for ADC planning, programming, and design. Building on the Model of Place and the placemaking process described in chapter 4, chapters 5, 6, and 7 offer extended discussion of the first three steps of the placemaking process: preparation, planning, and activity programming, respectively. Chapter 5 presents the critical concepts of vision statement and project concept as well as the importance of developing solid site criteria. These efforts help placemaking teams answer the Who? What? Where? When? Why? and How? questions of their project. These steps are essential to allow for movement from the likely more familiar world of people and activity programs to the likely less familiar world of architectural program, specifications, and construction documents, using the attributes of place experience as the critical link between the two. Chapter 6 covers key stages and products of the planning process: doing a feasibility study and needs assessment. Chapter 7 discusses creating an activity program.

Chapters 8 and 9 present a set of twenty-two guidelines, or Prescriptive Patterns, many of which are drawn from our analysis and our discovery of what works in practice in existing ADCs. The patterns in both chapters range

from very modest to quite substantial in terms of the required investment in time, effort, and money. Chapter 8 presents a set of prescriptive patterns for facilitating the daily life activities that typically occur in an adult day service center, while chapter 9 focuses on patterns related to health and related support services. Finally, chapter 10 presents a procedure for conducting a walk-through evaluation of any existing ADC, the Adult/Dementia Day Center Environmental Assessment (ADC EA).

Throughout Part III, a fictitious Adult Day Services Center that we have named "Better Day ADC" is used for illustrative examples. The examples stem from a collage of our professional experiences but are carefully crafted to reflect the kind of thinking that we believe innovative place making requires. We hope that the process illustrated by "Better Day ADC" will serve as an educational model for those seeking to develop exemplary ADCs in the future.

5.

The Process of Adult/Dementia Day Center Development

A Guiding Image: Your Project Vision

Regardless of its service or product domain, every organization has a purpose. This purpose provides the foundation for the organization's mission. This mission is typically articulated and made manifest in the *mission statement,* a document developed by the organization's leaders, staff, and other stakeholders. The mission statement describes the organization's reason for being—what the organization endeavors to achieve and how it intends to achieve those ends in terms of goals and objectives. In contrast with the "today" orientation of the mission, the *vision* describes where the organization imagines itself in the future. "Visions are not about monthly production figures or accomplishments; they are not about annual report projections or the work of public relation specialists. . . . Effective visions allow us to project into the future and transform our imaginations into reality" (Dykstra 1999, 110). While necessarily grounded in its given situation, an organization's visions are future-sighted and result from creative thinking. Visioning relies on the creative energies of a group. As ideas float back and forth and evolve, synergy develops in the course of the process. Generally, a single person or a small committee composes the written vision statement, but the process by which it is created is necessarily democratic.

One of the exemplars of visioning is the Constitution of the United States. For weeks, our forefathers gathered to discuss the guiding principles that would structure their newly founded country. In session after session, ideas were batted back and forth and hotly debated, some dismissed as others emerged. Eventually, James Madison wrote the document that we call the Constitution, which has guided the United States for over two centuries. No one could argue that the process of writing the Constitution was clean and orderly, yet it resulted in a magnificent vision that has stood the test of time.

Rather than creating a vision for an entire nation, here we are concerned only with developing a vision statement for an adult day setting. Collins and Porras (1996) suggest that a well-conceived vision consists of two components: a core ideology and an envisioned future. Core ideology is akin to an organizational philosophy that articulates the mission of the organization—the purpose of the organization and the goals it seeks to achieve—together

with the core values of the organization—the guiding principles that have intrinsic value to the organization and need no justification. Since many other sources of facility development address the topics of organizational ideology and values at length (e.g., Lindeman et al. 1991), our focus here will be on the envisioned future.

A Vision Statement: The Grand Opening

Collins and Porras suggest that "the envisioned future is what we aspire to become, to achieve, to create—something that will require significant change and progress to attain" and the final statement of the envisioned future must provide a vivid description—"an image that people can carry around in their heads" (1996, 66). Vivid visions motivate and inspire people. A clear vision statement enables people to see how their efforts contribute to the larger picture (Lipton 1996). While some people might find the traditional mission statement exercise to be meaningless and futile, an envisioned future paints a picture of where the group or organization is headed, and it thus becomes much easier to place one's own role into the overall framework of making that vision a reality.

How does one craft a vision statement? While there are no road maps for how to achieve this, one successful model we have used asks the development team to imagine themselves at the grand opening of the place they are creating. Envision leading the tour through the facility. Ask the vision team these and similar questions:

- What do you see?
- What is the staff doing? How are they interacting with participants?
- Who are the participants? What are they doing? How might you describe them?
- In what rooms do activities occur? What are those rooms like? How are they furnished? What are the finishes?
- What's outside? What sorts of nature, plants, flowers, trees? What are the outdoor spaces like?
- What are the views from the inside like? Describe the surrounding neighborhood. How does the place relate to the neighborhood? Are there interesting places to visit?
- What kind of personality does this place have? What does it "feel" like?

All of these questions will help shape a vision of realistic, tangible images. Of course, each person participating in the development team will provide details from his or her own areas of expertise, but perhaps more valuable is that this exercise encourages everyone to think about the place holistically and experientially. In fact, the process of brainstorming is usually enhanced when people are encouraged to think outside their areas of expertise. Administration can talk about architecture; architects can discuss program activities; staff can discuss staffing ratios and benefits packages—and everyone can talk about place experience. The framework of place is a useful tool for keeping visioning participants oriented toward the multiple aspects of place. It is important to remind visioners that the process is about much more than the activity program or building and that individual, social, and organizational aspects must be accounted for as well.

BOX 5.A

Vision Statement Example—Envisioning a Better Day ADC

The Better Day Adult Day Center (Better Day) is proud to offer state-of-the-art services that will enable our neighborhood seniors to remain in our community, maintaining their independence and dignity while enriching our environs. Better Day is delighted to have found a site within walking distance from our neighborhood center, where our participants have lived and shopped and walked for the past several decades. While not on the arterial, Better Day is located only one block west, placing it on treed land among multifamily housing; our site backs up to single family residences of the type in which many of our participants likely reside.

Our site has given us easy access from the street arterial and ample room for a turnaround with a carport for families dropping off their loved ones. The entrance to our facility is clear and obvious. There is a welcoming "true" front door with a walkway that connects with the sidewalk and parking lot as well as another entry under the carport. A staff member or volunteer greets all arrivals in the graceful reception area. The room's focal point is a large round wood pedestal table with a vase of freshly cut flowers. Participants are welcomed in and assisted with their coats, which are hung on personalized hangers. Vans arrive as early as 7:30 a.m. (our opening time), and all participants are brought in and invited to relax in the ample seating provided in the entry. To continue this welcoming feel, a "guest" bathroom (handicapped-accessible) is provided near the entry, just as is found in many households. While our receptionist-secretary (who is seated at a desk, not behind a "nurses' station") is ready to assist anyone who needs to speak to administrative staff in the immediately accessible office suite of our day center, most participants proceed into our café that serves as the heart of our program area.

Immediately upon entry into the café, a staff person is waiting at the U-shaped breakfast counter, where participants are asked, "Would you like some coffee? What do you take in it?" Other participants are seated at the counter or the few small café tables. The room is sunny and bright, with daylight shining in through the skylight and a window wall opening onto a secured courtyard. French doors lead out onto a covered, three-season porch and then out into the small, tranquil courtyard.

The café serves as the hub of activity at Better Day, connecting our "main street" of public activities and the activity program spaces. Main street spaces include a beauty shop, through which our personal care (bathing) area can be accessed, and our wellness center. The beauty shop also doubles as our podiatry care and massage area. The wellness center is a space large enough to accommodate 12 people to be engaged in physical exercise or rehabilitation activities and a small office for psychosocial therapies or personalized medical at-

(*continued*)

BOX 5.A
Continued

tention (dialysis, insulin, weight taking, etc.). Main street spaces have windowed storefronts that are easily visible from the café but also have blinds that staff may close when appropriate.

Participants enter into the program area through two sets of French doors. This program area opens up around 9:00 a.m., when there are enough participants to activate the area. Participants enter through the kitchen-dining area. The kitchen is an open space with an eclectic décor. The dining area continues this open feeling and has four tables for a total of 16 participants. To each side of the kitchen-dining area are smaller activity areas with operable window walls between them. One is a living room, in which participants engage in games, socialize, or watch TV. Off of the living room is a cozy inglenook with room for four and a glassed-in gas fireplace. Another space adjacent to the kitchen-dining area is a sunroom where some participants eat lunch and where at other times small activity groups requiring more intensive assistance take place. Finally, there are two alcoves: the one with the piano serves as a proscenium when guest musical acts visit; the other is a small space with window seats and bookshelves for quiet conversation and reading.

Participants take lunch in three distinct areas: the café, the dining room, and the sunroom, all of which are in close proximity to the kitchen. The dining room serves the most independent participants. The café and its breakfast counter allow staff to offer prompts for those who need it. The sunroom allows participants who cannot feed themselves to enjoy a meal in privacy.

Scattered throughout the program area are one- and two-person assist toilet rooms that are easily visible from activity or circulation areas. Each activity space also provides appropriate storage in the form of closets, cabinets, and furniture so that required materials are easily available for staff and participants alike. The circulation path is continuous, looping walkers back past meaningful destinations, such as the café and kitchen. Nowhere does it cut through an activity space; however, the path does provide visual previewing into spaces for participants.

Two secured outdoor areas are visually and physically accessible by participants at all times. One area is more contemplative, with flowerbeds and a water feature and with several benches for resting. The other is more active, with raised planters for gardening, a laundry line to dry dishtowels, and the like. Staff overview of these areas is achieved through the residential windows providing unobtrusive direct visual access to outdoor participants. Horticultural and other outdoor therapies are provided each week.

These spaces help us to serve up to 42 participants a day without a sense of being crowded or being part of a single large group all day long. We do so by having 10 direct care staff on duty each day. While

several are involved in support services, such as toileting and bathing, 5 or 6 are leading activities. Each activity typically has two staff or a staff and a volunteer, meaning that at any given time from about 10:00 until 4:00 (not including lunch), two or three different formal activities are offered concurrently in different activities spaces. One or two staff may also be involved in some one-on-one time with participants.

Activities are carefully orchestrated so as to get participants moving from place to place as a means to trigger their memories. In addition, the physical exercise stemming from this very natural movement is often more than day center participants receive in places that utilize only formal exercise programming. Finally, such movement tends to stimulate informal, friendly conversation between clients.

At the end of the day, one program is usually offered in the program space, but the majority of participants, knowing it is nearly time to go, gather in the café and have a decaffeinated coffee and a cookie as they wait for their ride. Once their ride arrives, many coming as late as 5:30 p.m. (our closing time), a volunteer comes back and leads them to the entry, assists them with their coat and sends them on their way, hopefully having experienced a Better Day.

The vision statement in Box 5.A intersperses commentary about all of the components of place. Description of the building serves as the most imaginal aspect of the vision, but issues of the number of participants and staff, the nature and range of the activity program, the various supports offered at lunch, and the hours of operation all reflect systemic thinking about the participants, staff, activities, and organizational structure that constitute this place and make it come alive.

Once a vision consensus has been achieved, it is often useful to dismantle the vision using the Model of Place framework. Does the vision cover all of the components? If not, add those elements that the development team feels are critical to achieving the ideal personality of place. In this way teams can move successfully between considerations of the whole place and the discrete decisions that need to be made.

Where to Operate? Site Criteria

An appropriate site for adult day services differs slightly from the site criteria for other projects for the elderly by virtue of the fact that adult day participants go home at the end of the day. Thus as compared to other senior facilities, it is even more important that an adult day center site be located near the homes of the elderly population being served. Furthermore, because of the community-based nature of many adult day centers, it is preferable that sites are located close to the community, not far from the beaten path.

Whenever possible, the site should:

- Accommodate the desired building size and configuration while retaining enough area for outdoor space, parking and driveways, and, potentially, water retainage

- Provide easy access to both public and private transportation (this suggests locations near major transportation routes)
- Have local utility services readily available
- Be located near community life such as shopping and entertainment as well as medical and emergency services
- Be near residential areas in which ADC participants reside
- Be accessible for deliveries and for services such as trash pickup
- Have a site topography that facilitates accessibility
- Be oriented to afford the facility with direct sun exposure in the morning and late afternoon hours, and sun protection during the middle of the day
- Allow for an architecturally defined, secured garden space that has both sunny and shaded areas
- Be located in an appropriately zoned area (the potential for rezoning must be carefully explored)
- Pose no environmental risks and have good soil conditions for building
- Be securable on option pending conclusion of the project development concept.

When a site is being considered, organizations should immediately seek out the neighborhood opinion leaders and educate them as to what an adult day center is and why it would be an asset to their community. Few people know much about adult day services, and such educational efforts go a long way toward ensuring a peaceful coexistence with the neighbors.

Moving from Vision to Project Concept

To ensure that the project moves from abstract concept to concrete reality, clear and concise communication of organizational vision to all organizational members, potential development consultants (e.g., architects, brokers, contractors), and neighbors and community leaders is essential. A vision statement itself may be viewed as intangible, complex, and perhaps for some, just too lengthy. Thus a synopsis of the vision statement, or a project concept that describes all the core components can be helpful. It begins with an outline of known background issues:

1. Project History
2. Financial Issues (i.e., proposed financing mechanisms, financial position of the organization)
3. Regulatory Issues (i.e., certification, licensure, accreditation)
4. Known Competitors

Several people involved in the project can distill these items from the vision statement. Each person engaged in this activity can systematically read through the vision statement, looking first for organizational issues, then moving on to social aspects, and so on. As the vision statement is distilled into a bulleted outline form, it is helpful to keep a running list of questions and concerns to be addressed. Once distilled, the resulting project concept will cover:

- Whom you aim to serve
- What the needs are as you understand them

BOX 5.B

Project Concept Example from Better Day ADC

It is the mission of the Better Day Adult Day Center to serve 42 elderly persons with varying levels of cognitive impairment by offering various psychosocial, personal care, and health-related services, which will maintain their community residence and independence as long as possible. To further this goal, Better Day seeks to provide the latest in dementia care practices within a state-of-the-art facility, providing our participants the greatest likelihood of postponing institutionalization until it is an appropriate choice.

BACKGROUND ISSUES

History of the Project

The idea for a Better Day arose from the personal experiences of three community members who realized that the elderly in the neighborhood faced premature institutionalization simply for lack of services that could be easily provided. Supporting their abilities more effectively would allow the elderly to remain in the community, thereby increasing neighborhood stability.

Financial Issues

With the support of the local business district and two neighborhood religious organizations, there is a modest amount of seed capital to move forward to assess the feasibility of their vision. The organization is hoping to kick off a capital campaign if the initial feasibility of the project looks promising.

Regulatory Issues

Currently, the organization is endeavoring to meet the national guidelines for adult day services, which are much more extensive than those required for certification in the state. Additional regulatory constraints may be possible, but are currently unknown to the group.

Known Competitors

No adult day centers operate in the area, although there is a senior center in the neighborhood and two continuums of care retirement communities within a two-mile radius. Because of the limited awareness of adult day center as a service option, a well-developed marketing plan will be essential for this development.

ORGANIZATIONAL CONTEXT

Better Day will operate as an independent, not-for-profit corporation with a five-person board of directors (including the community

(*continued*)

BOX 5.B
Continued

members currently involved in the project). The organization will be headed by said board, which will hire an administrator/program director several months prior to opening. The administrator/program director will develop the policies and procedures for the day center and make the remaining hires, pending board approval. Currently, we anticipate having 10 direct care staff each day although additional staffing may be necessary depending upon services to be offered. Outsourcing is a possibility for such things as maintenance, housekeeping, and meal preparation. The facility's hours of operation will be 7:30 a.m. to 5:30 p.m. weekdays.

Social Context

We expect staff to be professional, with special training in dementia care. Better Day will offer periodic training sessions for staff to maintain their state-of-the-art care giving practices. Staff will wear comfortable, yet professional street clothes (not uniforms), and will sit and eat lunch together with participants. The majority of participant activities will be in small groups. For most of the day, formal programming will offer two to three different activities concurrently. Allowances in staffing should be made for required one-on-one time between staff and participants, as well as a regular toileting program.

Participants

The Better Day Adult Day Center will serve cognitively impaired elderly people who need assistance with at least one activity of daily living or one independent activity of daily living. Once a participant requires more than 90 minutes of one-on-one direct care time each day or becomes violent, the organization will work with the family members to find a more appropriate service option. Most participants will take local van transportation to the day center; others will be dropped off by family or friends or by arrangement with another community group (i.e., fellow church members).

PHYSICAL SETTING

The site will be near a neighborhood center in close proximity to public transportation lines. The facility will be configured on the site to facilitate drop-off and parking areas as well as provide appropriate sun and wind exposure for two therapeutic gardens. Participant spaces will be located on the ground floor (administrative spaces may be on another floor, but ground floor is preferred). The following spaces have been identified as required:

1. Porte cochere (covered drive-through) and separate adjacent pedestrian "front door"

2. Foyer (reception desk, coat closet, seating, ADA toilet)
3. Café (to seat 16 people, 8 at a breakfast counter)
4. Beauty shop
5. Personal care area (bathing, laundry)
6. Wellness area (physical and related support activities, small private office)
7. Kitchen (large enough for 6 participants to engage in occupational therapy activities)
8. Dining (6 tables of 4 people)
9. Living room (for 12 people)
10. Sunroom (table for 8 people)
11. Alcoves off the kitchen/dining area (2, each sized for 4 people)
12. Toilet rooms (for facilities serving those with cognitive impairments NADSA guidelines suggest minimum one toilet to every six persons), distributed through the facility, each no more than 40 feet from any point within the program space
13. Various storage areas adjacent to each program space
14. Continuous circulation path
15. Protected outdoor garden areas (2)
16. In addition, the architectural design should supply plenty of natural light and unobtrusive previewing of areas through generous use of exterior and interior windows.

DESIRED EXPERIENTIAL ATTRIBUTES OF THE ENVISIONED PLACE

Several goals related to experiential attributes are found in Better Day's mission statement, for example, supporting functional abilities and maximizing personal control of participants. The vision statement goes further, referring to qualities such as being warm and welcoming, offering diversity in terms of spaces (tranquil, social, contemplative, active), providing variety and choice.

- Which services you seek to provide
- How you see yourself providing these services
- The kind of physical setting you hope to create
- The attributes of experience you intend for the place.

An example of a project concept is illustrated in Box 5.B.

Conclusion

Adult day centers operate in a precarious and ever-changing context. Regulations are ill-defined, sometimes ill-considered, and often counterproductive. Funding mechanisms are not well suited to the systemic care packages that adult day services typically need to provide. Moreover, the public knows very little about adult day centers and their services. Since other more institutional settings, such as nursing homes, offer parallel types of care, they tend to be perceived as competition rather than as potential networking partners.

For these reasons, a community needs assessment and financial feasibility analysis are absolutely essential. An organization needs to have the best information available to guide its service provision decisions. Attitudes regarding the proposed location of the adult day center as well as pricing structure affect project planning. For a project with little market awareness (compared with, for instance, a gas station), adequate and accurate planning is all the more critical. The needs assessment can serve a dual purpose: determining community preferences and educating the community.

The primary purposes of the needs assessment and feasibility analysis are to ascertain whether a project is viable, given the geographical market, economics, and existing competition, and to position the proposed project with respect to all three. This is why developing a vision statement and project concept are essential steps in the placemaking development process: an organization must have a concept that can be assessed for community need and financial feasibility. A thorough analysis will provide the information necessary to guide business decisions throughout the facility development process. Needs assessment and feasibility analyses may reveal significant risks for a proposed project, validate the project's potential, or reveal areas in which the project vision could be redesigned to enhance the likelihood of success. The following chapter illustrates the feasibility process step-by-step.

6.

Determining Feasibility of an Adult/Dementia Day Center Project

Financial Feasibility Statement: The Pro Forma

The financial feasibility statement, or pro forma, builds on the Project Concept and begins to give some form to the economic requirements and implications of that concept. The pro forma is vision, goals, and aspiration translated into economic terms. The project drives the numbers. Numbers can always be adjusted. However, it is imperative that desired attributes remain at the forefront, for it is these goals that should guide and shape every single decision made throughout the development process.

Capital Cost Projection

The initial part of the pro forma is a capital cost projection. Capital costs are those costs associated with creating the physical setting of the adult day center. Capital costs include:

1. Land acquisition costs
2. Site development costs, including
   - Demolition
   - Site preparation, including utilities improvements
   - Sidewalks, patios, and terraces
   - Parking lots and driveways
   - Landscaping, including fences and exterior lighting
   - Storm drainage
3. Construction costs, including
   - Construction of the building, including signage
   - Furniture, finishes, and equipment costs (FF&E)
4. Soft costs, including professional service fees (i.e., architects, engineers, attorneys, market analysts, project managers), and licensing and permitting costs
5. Contingency, usually a sum of 1–4 plus 5 percent
6. Financing costs, depending on financing options

1. Land Acquisition Costs

Land acquisition costs are either known, if the organization owns or is negotiating on a property, or they can be estimated by a real estate broker. Usually such estimates are based on a per-square-foot property cost, which reflects the prevailing rate in the area. Determining the size of the site is the first step. To begin, the development team will have to estimate the size of the site that the proposed facility will require. This is simply a ballpark figure to get at the numbers, not an absolute facility size. To generate a starting point, it might be helpful to recall that current NADSA (2002) standards recommend a minimum of 60 to 100 square feet (SF) of program space per participant. Therefore, if program projections anticipate providing day center services to 42 participants a day (the projected daily census of Better Day ADC), between 2,520 and 4,200 SF of program space will be needed. Note that program space is activity space only and does not include non-program-specific but essential support spaces for toilets, reception, storage, offices, bathing rooms, and the like.

Total building space, or gross square feet (GSF), consists of both program space and essential support space. Our comparative research study of adult day facilities (Geboy et al. 2001) showed a range of 131 to 219 GSF per participant; the average was 159 GSF per adult day center participant. In order to account for fluctuations in daily census figures as well as future projected program growth, we advocate establishing a ballpark GSF estimate by doubling the estimated program space square footage (formula 6.1). It should be noted that GSF does not include outdoor space such as gardens, or basic ancillary spaces such as parking.

The size of the site is a function of the size of the building, plus the additional square footage requirements for outdoor space as well as parking (formula 6.2). To estimate outdoor space, figure 20 SF for each participant. To estimate the space needed for parking, figure 375 SF per car. Unless the area of the proposed site features a convenient and dependable public transportation system, allow for one car per employee and allocate a minimum of five additional spaces for visitors and guests.

FORMULA 6.1
Estimating Facility Size

Average daily census	Projected	42
SF per participant	Recommended	100 SF
Program space	42 × 100	4,200 SF
Essential support space	2 × program space	8,400 SF
Total building space	Ballpark figure	8,400 SF

FORMULA 6.2
Estimating Minimum Site Size (based on use)

Building size	Ballpark figure	8,400 SF
Outdoor space	20 SF/participant	840 SF
Number of employees + 5 visitors	13 + 5 = 18 spaces (see Formulas 6.12 and 6.13)	
Parking	18 cars × 375 SF/car	6,750 SF
Total facility size		15,990 GSF

BOX 6.A
Tips for Estimating Facility Size

Tip: Estimating Outdoor Space
- Estimate 20 SF per participant

Tip: Estimating Parking Lot Space
- Estimate one car per employee plus five spaces for visitors and guests
- 375 SF per car

FORMULA 6.3
Estimating Minimum Site Size (based on FAR)

Building size		8,400 SF
Prevailing FAR of 0.5	8,400/0.5	16,800 SF
Adjust for minimum site size	16,800 SF × 1.25	21,000 SF
Acreage required for proposed site	21,000/43,560	.48 acre

A local zoning department can help with site size estimating by providing the prevailing floor area ratio (FAR) of the site under consideration (formula 6.3). Floor area ratio refers to the total buildable area of the building relative to the site area. Communities use FAR as a way of regulating the size of buildings located within a specified area. Floor area ratio is usually expressed as a decimal figure; for example, a FAR of 0.5 would indicate that

the building area could not exceed 50 percent of the total area of the lot. Therefore, if the projected building size (like that of the Better Day ADC) is approximately 8,400 GSF and the prevailing FAR is 0.5, the facility must be located on a site no smaller than 16,800 SF. Thus, site size is calculated by dividing the square footage of the building by the established FAR (8,400/0.5). Since sites are usually discussed in terms of acres, the SF figure will need to be converted into acres (an acre is equal to 43,560 SF). It may prove wise to estimate site size using both methods and proceed based on the larger estimated size. Both methods calculate the minimum site size required; therefore, it is necessary to adjust accordingly and to look for a lot 20–25 percent larger than the estimated size.

2. Site Development Costs

Site development costs are highly variable and are best estimated by a professional architect, contractor, or developer. Site development costs cover items such as demolition, site preparation, utility installations, roadway and sidewalk construction, storm drainage, and landscaping. For new construction, total site development costs generally range from 10 to 25 percent of the overall building construction cost (see below). The site development cost is largely dependent on how ready the site is for development. Do utilities already serve the site? Is the site flat or steeply sloped? What are the soil conditions? If the project calls for remodeling an existing building, the site development costs are likely to be lower relative to new construction (although land acquisition costs will be high because they include the purchase of the building). In order to estimate site development costs for the Better Day ADC, which we have been using for example for illustrative purposes, construction costs must first be estimated.

3. Construction Costs

Building Construction Costs. Like land acquisition costs, base building construction costs are based on a price per square foot; thus it is necessary to first estimate building size. NADSA (2002) standards suggest between 60 and 100 SF of program space per participant, and our recommended estimating ratio of program space to overall GSF is 2 to 1, or double the program space.

Construction costs may be estimated, based on information from comparable ADC facilities in the area, figures that can be obtained from program administrators. Architects or planners familiar with an area may also be able to provide construction cost estimates. Construction costs can be estimated for either new construction or renovation, but the two types of costs should not be mixed. For example, in talking to other ADC providers in your market, you might inquire about their construction costs. If information is obtained from a number of providers, determine the average cost per SF for calculation use. To estimate construction costs, simply multiply the GSF by the estimated cost per GSF.

For Better Day ADC, we obtained the costs of construction for several new ADC facilities that were recently built in the same geographic market and calculated an average construction cost of $113 per square foot. We will use this figure to estimate the building construction costs for the projected 42-participant Better Day facility (formula 6.4):

FORMULA 6.4
Estimating Base Building Costs

Building size	Ballpark figure	8,400 SF
Base building costs	8,400 SF × $113	$949,200

Finishes, Furniture, and Equipment Costs. Estimates for finishes, furniture, and equipment (FF&E) costs are based on a percentage of construction cost. However, the percentage depends on the kinds of services an organization plans to offer, which can affect furniture and equipment costs significantly. The FF&E figure also depends on whether the project is new construction or a remodel: FF&E in a remodel will be higher. For new construction, the costs of FF&E range from a low of 10 percent of the building cost to a high of 30 percent, and an average of 20 percent. Together, the costs of FF&E and base building costs make up the building construction costs (formula 6.5).

FORMULA 6.5
Estimating FF&E and Building Construction Subtotal

Base building construction costs	8,400 SF × $113	$949,200
FF&E	20% of $949,200	$189,840
Building construction subtotal		$1,139,040

BOX 6.B
Tips for Estimating Total Building Construction Costs

Tip: Estimating base building construction costs
- GSF × $ cost per GSF

Tip: Estimating FF&E
- Average 20% of estimated building construction cost

Tip: Total Building Construction Cost
- Building construction should constitute 60–70% of your total development costs. (For Better Day's total development costs, see formula 6.11.)

4. Soft Costs

Estimates for soft costs are typically based on a percentage of the building construction costs. This number covers an assortment of fees from architects, general contractors, real estate brokers, attorneys, and so on, all of whom are involved at some point in the development process. Soft costs are typically figured at 25 percent of the construction cost (formula 6.6).

In order to determine the total development costs of the Better Day ADC project, we must return and attach dollar figures to the first two items of the pro forma, land acquisition costs and site development costs.

Figuring Land Acquisition Costs. We have estimated the total facility size to be 15,990 GSF (see formulas 6.2 and 6.3). Based on our previous calculations (see formula 6.3), the lot size required for the Better Day ADC is 21,000 SF, or approximately .48 acre. The asking price of the lot we have in mind is $85,000 per acre. If we purchase half an acre, our land acquisition costs will total $42,500.

Figuring Site Development Costs. The proposed site for the Better Day project is already served by municipal utilities, but the lot does have a slightly awkward slope. Correcting the slope is a relatively inexpensive undertaking, which will put us on the low end of site development costs. We can estimate our site development costs at around 12.5 percent of construction costs ($1,139,040, see formula 6.5), or $142,380 (formula 6.7).

5. Contingency

Construction costs, soft costs, land acquisition costs, and site development costs add up to a project subtotal of $1,608,680. As a buffer, add a contingency budget. For new construction projects, contingency is figured at 5 percent of construction costs (formula 6.8). For remodeling projects (which

FORMULA 6.6
Estimating Soft Costs

Building construction subtotal	see formula 6.5	$1,139,040
Soft costs	25% of $1,139,040	$284,760

BOX 6.C
Estimating Soft Costs

Tip: Estimating Soft Costs
- 25% of construction costs

FORMULA 6.7

Estimating Site Development Costs

Building construction subtotal	see formula 6.5	$1,139,040
Soft costs	25% of $1,139,040	$284,760
Land acquisition costs	see formula 6.7	$42,500
Site development costs	12.5% of $1,139,040	$142,380
Subtotal development costs		$1,608,680

BOX 6.D

Estimating Land Acquisition Costs

Tip: Estimating Site Development Costs

- Range of 10–25% of construction costs

FORMULA 6.8

Estimating Contingency and Total Development Costs

Building construction subtotal	see formula 6.5	$1,139,040
Soft costs	25% of $1,139,040	$284,760
Land acquisition costs	see formula 6.7	$42,500
Site development costs	12.5% of $1,139,040	$142,380
Subtotal development costs	see formula 6.8	$1,608,680
Contingency	5% of $1,139,040	$56,952
Total development costs		$1,665,632

BOX 6.E
Tips for estimating Contingency Costs

Tip: Estimating Contingency Costs
- 5% of construction costs for new construction
- 10–12% of construction costs for remodels

are historically unpredictable), contingency is figured between 10 and 12 percent of construction costs.

Although these numbers are estimates only, based on projections and ballpark figures, they do provide a necessary starting point for understanding the construction process and estimating how much things cost. Basic knowledge of pro forma numbers confers project control, and ignorance is a sure ticket to loss of ADC project control.

6. Financing Costs

Finally, since the capital cost projections need to include the cost of financing the project, the projection is not yet complete. Financing costs, however, vary considerably from lender to lender. Since it can be time-consuming—and even confusing—to secure information from the large universe of lenders, and since determining the best rates requires a fair amount of financial acumen, we recommend enlisting the assistance of a developer or financial consultant. For our purposes, however, we will assume that Better Day ADC will be fully financed with a traditional 30-year loan at 6 percent interest. Interest calculation software readily available for free on the World Wide Web demonstrate that the interest paid during the thirty years of this loan would equal $1,929,438 (formula 6.9). Adding this cost of financing to the total development costs results in the complete capital cost projection.

While the total capital cost projection shown in formula 6.10 may seem

FORMULA 6.9
Calculating Capital Cost Projection

Total development costs	see formula 6.8	$1,665,632
Loan term	30 years	
Interest rate	6%	
Total interest over loan term		$1,929,438
Capital cost projection		$3,595,070

FORMULA 6.10
Calculating Capital Cost Per Diem

Capital cost projection	see formula 6.9	$3,595,070
Capital cost per year	30 years	$119,836
Capital cost per day	206 days/year	$460.91
Capital cost per participant per day	40 participants/day	$11.52

daunting, capital costs are spread out over thirty years, so the annual capital cost expense is $119,836. Computing capital cost on a per day, per client (rather than annual) basis results in a dollar amount that can be helpful in setting client fees. To compute costs per day, per client, divide the annual capital cost ($119,836) by number of days the day center will be open each year (260) and by the projected, average number of participants minus a safety margin (for no shows and so forth) (42 − 2 = 40). The resulting capital cost per day per client is $11.52 (formula 6.10).

For a purpose-built facility, the big numbers in capital cost are construction and financing. However, a purpose-built, dementia-capable physical environment adds therapeutic value. Financing costs, on the other hand, are quite straightforward and offer no therapeutic value; thus in this area, organizations can be as creative as possible.

Operating Cost Projections

Over the life of a facility, operating costs far exceed capital costs. At this point in the process, it is not necessary to calculate a detailed operating budget, but there should be some sense of the projected operating costs in order to develop and "market test" a reasonable fee structure. Many suggest completing the needs assessment before projecting operating costs; however, a useful needs assessment (chapter 5 and later in this chapter) must be based on some idea of how much an organization anticipates charging as a daily rate. The proposed daily rate will help establish the target market in terms of income qualification—a very important factor in needs assessment. The projected daily rate is heavily influenced by the proposed operating budget for the facility (Brannon 1989).

Estimating Staffing Expenses

To arrive at a reasonable estimate of operating expenses, one needs to speculate how many participants will be served each day and how many staff persons will be assigned direct care responsibilities. In general, the NADSA (2002) standards suggest a staffing ratio of no less than one staff per six participants (1:6). However, for adult day centers serving the cognitively impaired, NADSA recommends a staffing ratio of 1:4; Lindeman and col-

leagues (1991) reported Alzheimer's specific day centers operating with ratios of 1:3. Staff-participant ratios should be drawn from the number of staff "actively involved with the participants" (NADSA 2002, 65), which implies that management positions (e.g., program director) are best not counted when calculating the staff-participant ratio. For example, Better Day ADC is developing a day center for 42 cognitively impaired participants and aiming for a staffing ratio of 1:4, which means that ten full-time (FT) direct care staff members are needed. For the sake of example, nine assistants will be paid $23,000 per year, and an activities director will be paid $32,000 per year. Thus, the direct staff will, as a group, earn a total of $239,000 in salary (formula 6.11).

In addition to direct care staff, other relevant adult day center positions include administrator, program director, social worker, nurse, activities coordinator, various therapists, and ancillary personnel (i.e., clerical, drivers, and maintenance). At Better Day, the program director will also serve as administrator, and there will be a part-time (PT) social worker, and PT nurse. Two volunteers will cover the receptionist/secretary position. Other services will be contracted out as needed. Thus Better Day will have a total of thirteen paid employees. Annual salary expenses are calculated by adding the $239,000 earned by direct care staff, $54,000 for the program director, $18,000 for the PT social worker, and $24,000 for the PT nurse for a total of $335,000 (see formula 6.12).

As a general rule, direct salary expenses will range from 50 to 66 percent

FORMULA 6.11
Estimating Staff Salary Expenses

Direct care: FT assistants	9 at $23,000	$207,000
Direct care: FT activities director	1 at $32,000	$32,000
Direct care staff subtotal		$239,000

BOX 6.F
Estimating Staffing Expenses

Tip: Estimating Staffing Needs
- 1:6 NADSA ADC guideline
- 1:4 NADSA guideline for serving the cognitively impaired
- 1:3 reported by Lindeman et al. 1991

Tip: Estimating Operating Expenses
- Direct salary expenses for ADCs range from 50–66% of total operating expenses

FORMULA 6.12
Estimating Staff Salary Expenses

Direct care staff subtotal		$239,000
Program director/ administrator FT	1 at $54,000	$54,000
Social worker PT	1 at $18,000	$18,000
Nurse PT	1 at $24,000	$24,000
Staff salary subtotal		$335,000

FORMULA 6.13
Estimating Annual Operating Expenses

Staff salary subtotal		$335,000
Salary: OE ratio	$335,000/6	
Annual operating expenses	Estimated	$558,333

of an organization's total operating expenses. The figure will depend on the number of outsourced services, the extent of employee benefits, and a myriad other operational issues. If Better Day's total salary expenses make up 60 percent of total operating expenses (OE) and Better Day will serve 42 participants with a staffing ratio of 1:4, initial annual OE total $558,333 ($335,000/0.60 = $558,333). (See formula 6.13.)

Though many ADC providers find inventive ways to cover expenses, fees remain a primary revenue source. To calculate the daily fee needed to cover operating expenses, the annual OE of $558,333 is divided by the number of days the center will be open each year (approximately 260). $558,333 spread out over 260 days equals $2,147.43 in operating expenses per day. Since Better Day projects a daily census of 42 participants, it is tempting to divide the per diem OE by 42 to find the operating expense per client per day. Again, though, a better budgetary practice is to build in a safety margin; thus, the daily census figure should be 40 people per day. $2,147.43 divided by 40 equals an operating cost of $53.69 per day per client (formula 6.14).

Estimating Break-Even

If the daily operating cost per day per participant of $53.69 is added to the $11.52 daily capital cost per day per participant (formula 6.10), the Better

FORMULA 6.14
Estimating Operating Expenses Per Diem

Annual operating expenses	Estimated	$558,333
Number of operating days	260	
Operating expenses per day	$558,333/260	$2,147.43
Number of daily participants	40 (safe census figure)	
Operating expenses per day per participant	$2,147.43/40	$53.69

Day project must average $65.21 per day per participant in fees in order to break even. An organization would use this break-even number in its needs assessment study to project the size of the income-eligible market for a proposed adult day center. However, since many adult day centers are mission-driven and want to aid the underserved, they simply plan on raising upwards of 45 percent of their revenue from grants, donations, and fund-raisers (Reifler et al. 1999). In a national study of forty-eight ADCs, Reifler and colleagues found that the ratio of mean net operating revenue to total expenses was 0.83. In other words, 17 percent of expenses were covered by sources other than fees. If the Better Day organization covered 17 percent of their expenses from nonoperating revenue, the daily cost per client per day would be 83 percent of $65.21, or $54.12 (formula 6.15). This cost compares favorably with findings of a 1994 study reporting that the average cost of a day of care at that time was $47 (Cox & Reifler 1994). Adjusted for inflation, $47 in 1994 is equivalent to $54 in the year 2000, and thus in real terms, the cost of adult day center services has not changed in nearly a decade.

FORMULA 6.15
Estimating Costs of Providing Services

Operating expenses	Per day per participant	$53.69
Capital costs	Per day per participant	$11.52
Daily cost unadjusted	Per day per participant	$65.21
Daily cost adjusted for 17% charitable cost coverage	$65.21 × 0.83	$54.12

Of course, numbers derived in this fashion are all based on assumptions, and this is why it is critical to keep track of the assumptions. Pro formas are simply intentions put into economic terms. There are no absolutes; everything in the financial feasibility statement is negotiable. Every part of the system that makes up an adult day center is in negotiation with all others, but in the end a balance must be struck. The pro forma is a financial perspective of the project; as decisions are made, the pro forma will inevitably change. Financial feasibility statements are not cast in stone but are simply working documents to guide financial decision-making processes. As more decisions are made and more knowledge is gained, the pro forma becomes increasingly well-informed.

Needs Assessment: If You Build It, Will They Come?

To a large extent the success of an adult day services center depends on how well it meets the needs of the market. Thus it is essential to conduct a community needs assessment (sometimes called a "market feasibility study"). A needs assessment proceeds like a crafts project: the first cut is rough, and the shape is progressively refined with increasingly more accurate instruments. Also, much like craftwork, a needs assessment is more art than science. It requires an intimate knowledge and "feel" for the locale and the field of adult day services. For these reasons, a reputable and experienced market research firm with a background in projects for the elderly, and preferably in adult day services, is ideal for conducting the needs assessment. An experienced firm will have the craftsmanship and expertise necessary for taking hard numbers and translating them into findings that can inform development decisions. Furthermore, since financial institutions will normally require an independent market analysis prior to releasing funds, a report from a reputable firm should satisfy this obligation.

Secondary Market Research

Secondary market research refers to the gathering and use of any data that have been collected for some other purpose. Demographic data are the most basic secondary market research tool and can help clarify needs assessment issues. Because demographic data are usually purchased "second hand" from a market data resource such as Claritas, National Planning Data Corporation, or even the U.S. Census Bureau, this initial phase of needs assessment is called "secondary market research." Data resources on the World Wide Web include both U.S. Census–based demographics (stratified by age, income, and assistance needs, along with growth projections) and competitive data for locales across the country. A market analyst can examine these data to determine the number of people in the target market who are likely to need adult day services and who fit the economic profile of individuals the center will serve.

Primary and Secondary Market Areas

What is the geographic area that the proposed adult day center will serve? Most commonly, this area is defined by establishing a given radius (or "catchment area") within which participants will reside. If a market research firm

knows the locale and has experience in the adult day center industry, it will be better able to provide realistic estimates. The most important designation is the primary market area; sometimes a wider secondary market area is also specified. Determining the radial boundary of a primary market area depends on the urban density of the area in which the ADC project is proposed. The primary market area in an urban area consists of a two-mile radius from the proposed site and about a five-mile radius from a proposed suburban site. For an ADC project in a rural area, the primary market area might be as wide as a 10- to 20-mile radius from the proposed site.

An important issue to consider in estimating market boundaries for adult day services is the "time in transit" that the elderly participant must tolerate in order to reach the day center facility. Many adult day service providers consider 15 to 20 minutes a suitable transit time, a trip that in most regions of the United States is consistent with the primary market area of five radial miles. The primary and secondary market areas will also be influenced greatly by the environmental context in which the project is situated: Are there significant travel times? Is there a high-density population in the area? Are there natural (rivers) or man-made (interstate highways) barriers? Any social or economic barriers? What are the patterns of referral? Project-specific factors such as the reputation of the ADC organization, the competitive situation, and whether the proposed adult day center is planning on offering unique and highly desired services will also be influential in determining the market areas.

Age Qualifier

The primary market segment is established through an age qualifier. Remarkably, this is somewhat difficult to establish for ADCs because the service is need-driven rather than age-driven. However, according to NADSA the average age of ADC participants nationwide is 76; thus, an organization could either use 70 and older or, more conservatively, 75 and older as the appropriate age cohort to estimate market size. This marker is simply an indicator and can easily be adjusted based on the services a particular adult day center is proposing.

Income Qualifier

Once an age qualifier is established, a market analyst should determine how many of those seniors in the target population segment have the ability to pay for the proposed service. Many adult day centers cater to the lower-middle income segment, and if this is the case, the matter of affordability should be made obvious to the market analyst. The daily rate must cover the costs of project development and construction in addition to the costs of services provided. Some services may be offered on a pay-per-use basis (e.g., baths), and these should be considered; but for the ease of illustration, the remainder of this chapter will assume that the costs of daily service are spread out evenly among all attending participants.

In making assumptions regarding ability to pay the daily rate, it is not advisable to include family resources such as assistance from adult children, the sale of a primary residence, and so forth. Moreover, do not overly complicate calculations by considering all possible scenarios an adult day center

might encounter (e.g., participants who come once per week and those that come every day). While these things may eventually happen, demographics is a rough secondary research tool. These refinements can be better addressed later in the needs assessment process.

The figures from the preliminary financial feasibility projections for Better Day serve as an example: the daily rate was estimated at $54.12 per participant (see formula 6.15). On national average, participants attend a day center about three times per week. If this number is used as a benchmark, the average Better Day client must be able to spend roughly $162 per week on adult day services, or $650/month. [Note: This monthly cost is helpful when an organization refines the needs assessment. It will prove useful as a comparison to average Social Security benefits, which are often the major income source for lower-moderate income seniors.] This computes as $7,800 per year ($650/month × 12 months/year). The underlying question is: What percentage of after-tax income are clients willing, or able, to spend on adult day services? Answers from market analysts and day center experts range from 25 percent to as high as 50 percent of annual disposable income. If seniors in need of adult day services are willing to spend up to 40 percent of their disposable income on those services, that would mean that a yearly cost of $7,800 (see above) could constitute no more than 40 percent of an average participant's disposable income (this is called the fee-to-income ratio). From here, we can estimate that our average participant's annual disposable income must be $19,500 ($7,800/.4 = $19,500). Assuming an estimated federal income tax rate of 15 percent, this means the average participant would need to have a gross annual income of $22,425 ($19,500 + 15% = $22,425).

Many seniors who can afford it will likely opt for more expensive home health care or assisted living. Since assisted living facilities rarely cost less than $2,000 per month, and the fee-to-income ratio for such facilities is 75 percent, seniors who are more likely to choose assisted living must have after-tax incomes of at least $32,000 annually ($2,000 × 12 months/year = $24,000/.75 = $32,000). Assuming a tax rate of 18 percent, it is very probable that those seniors whose incomes exceed $37,760 may very well choose against using adult day services ($32,000 + 18% = $37,760). Thus, a market analyst may recommend using an income bracket—in this case, seniors between the income levels of $22,000 and $38,000—rather than a simple income qualifier.

Need for Assistance Qualifier

At this point the market analyst can estimate the number of age-and-income-qualified individuals residing in a target area. However, not all of these individuals need adult day services. NADSA reports that more than 40 percent of adult day center participants require assistance with three or more activities of daily living (ADLs, e.g., bathing, grooming, dressing, toileting, feeding, transferring), and almost 60 percent of ADC participants require assistance with two or more ADLs. Fifty percent of ADC participants have some form of cognitive impairment (which is why this book suggests designing dementia-capable facilities). Although it is possible to simply estimate the amount of assistance the target-market seniors may require, mar-

ket analysts are increasingly considering the need for assistance quite valuable in estimating a target market.

Most market analysts begin with the assumption that those seniors with no need for ADL assistance will simply not choose an adult day center. Similarly, they will argue that those individuals who need help with five or six ADLs probably need a higher level of care than is offered in most day centers. These data suggest that somewhere between 20 and 30 percent of persons 75 to 84 years of age have a level of dependency paralleling the dependency profile provided by NADSA. This percentage jumps to somewhere between 33 and 40 for individuals 85 and older. Thus, many market analysts will trim the gross estimate of age-and-income-qualified seniors in the target area by using an assistance-level percentage for each age group. Again, these numbers are only a point of reference; secondary market research is simply a rough guide to estimating the market.

Competitive Analysis

Once target-market size has been estimated, the next step is assessing market supply. In order to estimate the existing "supply" of adult day services, current or anticipated "competitors" must be accounted for. Just exactly who constitutes a competitor is a highly subjective issue. In some areas, where health care consumers have little or no knowledge of adult day services, it is possible that the target market will consider all elder care providers—nursing homes, home health care services, and assisted living, for example—as viable ADC options. Thus, the competitive environment for an adult day center may even include elder care providers who do not provide adult day services! Comparability judgments are vital to a sound competitive analysis—another reason for having an experienced market research team conduct the needs assessment.

Regardless of how the competition is defined, the competition's location is crucial. Some elder care providers may pull from a target market because of the simple fact that there is nothing else available. Whether or not this is the case, it is also important that a competitive analysis account for projects currently in development. While information on pending projects is sometimes difficult to obtain, reliable sources available to the well-networked care professional include trade groups, industry newsletters, or community zoning boards.

In addition to gaining a general understanding of the other ADC providers who are operating in a proposed market area, one of the basic tasks of competitive analysis is to determine the current market supply. Market supply refers to the number of ADC participant "slots" that are currently available. This number can be determined by adding together the total daily capacity of all ADC providers in the market. The market supply figure represents the number of individuals currently being served as well as any idle capacity.

One market phenomenon unique to adult day services is that not every person who is enrolled with an ADC provider attends the facility every day. Our research (Geboy et al. 2001) suggests that the ratio of enrollees to daily census is around 2 to 1—that is, for an adult day center to have an average daily census of 40, it will have about 80 enrolled participants. To account for

this ratio in an estimation of market supply, calculate the market supply first, and add roughly half again (50%) for a more conservative market capture estimate.

Competitive analysis can also identify gaps in existing services (e.g., no one in the market offers a la carte bathing). An astute adult day center organization will recognize these service gaps as opportunities and might consider supplementing the proposed project concept and vision with services for which market demand exists. Renegotiating the vision in light of market information will only enhance the project's chance for success.

Market Demand

Market demand is an estimate of the total volume of a product or service that can be expected to be purchased by a defined customer group in a defined geographic area. The formula for estimating market demand is simple: Potential market demand minus the current market supply equals residual demand. Demand is determined initially by two factors: market area and market size. Market area is a geographic factor. Market size, in the case of ADC, is based on the two characteristics described above: age and income, both of which are generalized by geographic residence. We have suggested that ADCs proposed for urban areas establish their primary market area using a two-mile radius; suburban ADCs need to use a five-mile radius, and rural ADCs need to use a radial range of ten to twenty miles.

A third criterion for assessing market demand for adult day services relates to the level of assistance or care necessary. NADSA reports that nearly 60 percent of adult day center participants require assistance with two or more ADLs, such as bathing, grooming, dressing, eating, and toileting; more than 40 percent require assistance with three or more ADLs. In addition, it is estimated that 50 percent of participants suffer from some degree of cognitive impairment. Related data projections suggest that roughly 20 to 30 percent of the population segment 75 and older has the level of dependency described in the NADSA profile; among those 85 and older, this level of dependence is estimated for between 33 and 40 percent of that age group. Therefore, it is reasonable to use the low-end benchmark suggested by the NADSA profile of ADC participants: 20 percent of the population segment age 75 and older as potentially in need of adult day services.

Regardless of target parameters, U.S. Census data according to zip code (available on the World Wide Web or in the local library) are easy to use for calculating total market size. Simply determine which zip codes lie within the primary and secondary market areas, and tally the 75+ populations for those zip codes to calculate the target market size.

The Better Day ADC project is being proposed for an urban location within a major U.S. city. For Better Day, our competitive analysis has revealed that there is one adult day service provider currently operating within a primary market boundary of a roughly two-mile radius surrounding the projected location. This existing ADC cares for an average of 48 participants per day and has an enrollment of about 96. Census data indicate that 1,810 people age 75 and older reside in our primary geographic market area. From there, we apply NADSA's 20 percent need for assistance profile to determine the residual market demand for Better Day ADC. We use this per-

FORMULA 6.16
Estimating Market Demand

Current market supply	1 ADC × 48	48
"Captured" market (attendees:enrollees)	48 × 2	96
Primary target market population	75+ population	1,810
Target market size	20% 75+ population	362
Residual market demand	362 − 96	266

BOX 6.G
Tips for Estimating the Market

Tip: Figuring geographic market boundary using time in transit
- No more than 15–20 minute drive to ADC

Tip: Estimating market supply
- Market Supply = Total number of already available ADC slots in market area

Tip: Estimating Market Demand
- Potential Market − Market supply = Residual Market Demand

centage to determine the size of the potential target market. Finally, we subtract the current market supply (using the conservative "captured" estimate described above) from the potential target market to arrive at the residual demand figure of 266. As shown in formula 6.16, the residual demand figure of 266 is a strong signal of significant (perhaps pent-up) market potential for our proposed ADC.

Primary Market Research

Primary research entails the collection and analysis of data gathered firsthand. Common primary research methods employed by market research firms include surveys, interviews, and focus groups. Since these are costly endeavors, it is important to analyze secondary market data first; if results are favorable and warrant moving forward, then a market research firm can be engaged to conduct primary market research.

Primary market research produces qualitative data that provide an understanding of consumer needs and preferences, attitudes, and opinions.

Such information informs decisions relating to all of the components of place, for example:

- Organization: May inform fee structures
- Social: May inform services to be provided
- Participants: May refine client profile
- Physical: May inform site selection.

These data are gathered through direct communication with prospective clients, their families, and industry opinion leaders or "movers and shakers" (such as organizations from whom referrals might be gained). Primary market research information should include, but not be limited to:

- Knowledge and understanding of adult day centers
- Need for services
- Perceptions of the project concept
- Perceptions of various site alternatives
- Perceptions of the proposed pricing structure
- Perceptions of the care provider organization.

Because primary research data are project specific, they may reveal the need to change some of the project concept assumptions or market penetration rate calculations. Incrementally, the broad assumptions made earlier in the development process will be refined with grounded knowledge of the specific situation. As more information is gained and the number of decisions increases, assumptions and decisions are continually reevaluated, and their impact on each component of place is reassessed. The development process is one of constant negotiation; careful orchestration is necessary, or things can spiral out of control very quickly.

7.

Developing an Activity Program

Living consists of a series of discrete yet interconnected activities. Eating, sleeping, working, playing—these are the stuff of life, the elements that satisfy goals and give meaning and relevance to the human condition. As people age, the activities of daily living assume even greater significance; they become touch points of reality, connections to lifetimes fully experienced and well-lived.

Everyday activities, often undervalued in more traditional place types serving the elderly such as nursing homes, are the lifeblood of adult day programs. Too often, however, activities for older persons are diversional rather than therapeutic. While diversional activities are acceptable as entertainment or recreation, therapeutic activities are necessary to "stimulate changes in the participants' abilities from dysfunctional to functional" (Hammill & Oliver 1980, 3). By focusing on each participant's existing abilities, therapeutic activities improve function and mediate further deterioration. Thus, activity programming for an adult day center—the daily life of the place—can be truly successful only when therapeutic activities are thoughtfully planned and creatively conducted. Of course, multiple factors influence the activities program of any given adult day center: the current and projected abilities of participants; the training and number of staff; and, central though typically overlooked, the constraints and resources afforded by the physical setting. An activities program is frequently tied to an organization's mission; therefore, it is drafted prior to the design, renovation, or selection of a physical setting. Careful planning of the activity program provides a necessary foundation for designing a physical environment that will enhance and support the program, the abilities of staff, and most importantly, the quality of life for participants.

Valuing Strengths, Abilities, and Challenges

Participant Profiles

Without a doubt, the most important element in an adult day center is the participant (Webb 1989), and thus virtually all the literature on programming for dementia stresses the importance of individual care assessments (e.g., Alzheimer's Association 1997; Rader 1995; Zgola 1987). A common adage of ADC providers underscores the importance of the individual: "When you have met one person with Alzheimer Disease, you have met but

one person with Alzheimer Disease" (Bell & Troxel 1996). Since 95 percent of adult day centers provide care to participants with dementia (Zawadski & Von Behren 1990), any new facility must be dementia-capable. The early stages of planning do not allow for the opportunity to meet face-to-face with potential participants, so the question is, how ought one to proceed?

The feasibility study for our proposed Better Day project (see chapter 6), resulted in a general idea of the prospective market and characteristics of the likely participants. Though the particulars may be provisional, familiarity with the needs, interests, and expectations of the market provides a foundation for initial activity programming. Although participants may have a wide range of physical and cognitive limitations, the activity programming process begins with, and benefits from, a definition of the types of needs that should be met. An organization's response to the range of needs is the scope of services. Of course, the scope of services is not determined based solely on statistics and estimates of participant abilities; it reflects organizational mission, values, and vision. The scope of services decision does, however, begin with identifying the functional characteristics of participants. What are their likely needs? Interests? Abilities?

Developing a participant profile is a valuable technique for summarizing the characteristics of potential clients. This profile of a "typical" participant will consist of demographic, geographic, economic, functional, and other relevant information already gathered. The client profile is a useful guide in establishing admission (or "membership") and discharge criteria (or "criteria for recommending advanced services"). The participant profile will also shape expectations regarding client activities and staffing decisions. A preliminary outline of staffing needs, expected staffing ratios, and staffing patterns must also be outlined in order to ensure effective activity programming. Preliminary staffing figures were already established in the financial pro forma; the test now is to determine whether the numbers work in conjunction with the emerging activity program. Given what is known about potential participants based on participant profiles, will the number of staff budgeted for in the pro forma activity programs be best suited for them? What has to give? There will be constant negotiation between the most suitable activity program and an organization's fiscal constraints.

Focus on the Potential for Participant Success

Detailed program planning for a participant group that is still only preliminarily defined is a challenge. According to Hellen (1998), the analysis of a proposed program activity considers:

- How the activity may be modified
- Its frequency as part of the effort to establish a routine
- How many cues are involved
- How safe the activity is
- How adaptable the activity is to change
- The dignity the activity promotes
- The cultural relevance of the activity
- Simply, the pleasure and "fun" derived from the activity.

Zgola (1987) suggests three basic factors for analyzing activities: (1) the demands placed on the participant; (2) the value of the activity; and (3) the

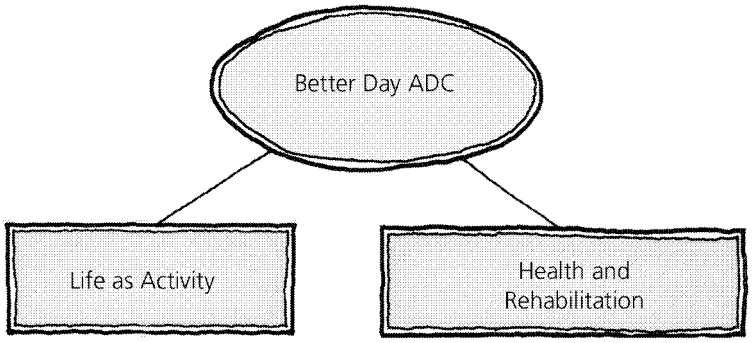

Figure 7.1. *The two strategic orientations of adult day services*

success (or failure) potential of the activity. It is imperative that the demands of an activity match participants' retained abilities (cognitive, physical, and psychosocial). Consistent with Lawton and Nahemow's model of competence and environmental press (1973), a misfit between activity demands and retained abilities may indicate that an activity is unsuitable or may suggest ways in which an activity should be broken down or modified to enhance the likelihood of participant success. Rather than focusing on what a client cannot do, activity selection should be based on an appreciation of what the client is able to do, thereby maximizing and preserving those functions. The value of an activity may be more difficult to ascertain, but when the organization is clear about what it is trying to achieve with each activity, value becomes clear. *The overarching goal of any activity should be client success, because success supports self-esteem.*

Giving the Activities Program Direction: Strategic Orientations

Perhaps the greatest challenge of activity programming for adult day centers lies in ensuring purposeful continuity across the different activities. As noted, the value of an individual activity is established when the care organization makes the purpose and intent of that activity clear to participants, family, and staff. All too often, however, a perfectly adequate activities program fails to realize its potential for richness and meaning due to a lack of programmatic continuity. Individual activities must share a unifying direction. Our research (Geboy et al. 2001) suggests that discrete activities within an adult and dementia day center program can achieve continuity via two guiding principles, or Strategic Orientations: Life as Activity, and Health and Rehabilitation (figure 7.1).

Strategic Orientation: Life as Activity

Hellen (1998) argues that the most therapeutically beneficial activities for people with dementia are what she categorizes as "daily life stuff." Although much of this activity—preparing breakfast, sweeping the floor, checking messages at the office—may seem rather mundane, these elements play essential roles in defining who we are as people. Each activity gives a person a sense of responsibility and accomplishment. The problem with most adult day center activity programming is that activity is diversional rather than purposeful; it is aimed at keeping participants occupied. In contrast, therapeutic activity has purpose: it is aimed at accomplishment. The activity must be congruent

with the person, not with organizational agenda. "Experiences void of meaning or without purpose can lead to fears, paranoia, catastrophic reactions and depression" (Hellen 1998, 2). Thus, the design of the activities and the settings of adult day centers must be carefully orchestrated, lest "experiences void of meaning" escalate the progressive decline of dementia.

For the frail elderly and cognitively impaired, a normal day consists of continuous challenges that can foster either success or disillusionment. Thus, the basic "stuff" of life provides meaningful opportunities for exercising retained abilities and maintaining a sense of self-esteem. While the work of one's lifetime—housekeeping, laundry, office work, mechanics, parenting—may be taken-for-granted aspects of life, it is instrumental in shaping personal identity. *Thus, the work of a lifetime is central to one's sense of self, and the tasks that make up life's work should be facilitated in an adult and dementia day center.*

Cooking and baking are pleasant and meaningful activities in most households. In other households, pleasurable life activities include "puttering" and fixing things, playing cards, or practicing a hobby such as painting or playing an instrument. Another example of the daily "stuff" of life is going outside: even on bad weather days, people go outside, perhaps to garden, walk the dog, or simply take a break from being inside. The need for being outside is natural. The restorative qualities of the natural environment provide therapeutic opportunities for those with cognitive impairments.

Human movement is the series of physical progressions that compose and choreograph the discrete activities of life into a cohesive and meaningful story. Considering the experiences of people as they move through the day center—imagining them engaged with the activities, objects, and spaces—helps clarify many of the issues that must be resolved within the facility's spaces.

Strategic Orientation: Health and Rehabilitation

Even adult day programs that initially provided mainly or exclusively social programs will eventually provide health and rehabilitation services as the health of their aging population inevitably declines. Certainly, many tasks associated with health monitoring (e.g., taking blood pressure, weighing) already occur in ADCs, and such activities have a very different character than the daily life activities described above. While many daily life activities are social in nature, activities related to health and rehabilitation are principally private and may require some level of assistance; hence, they warrant a rather different orientation. Within the ADC environment, NADSA *Standards and Guidelines* (2002) refer to two levels of activities that require nursing services: enhanced and intensive. *Enhanced services* involve restorative, supportive, or rehabilitative nursing care. Physical, occupational, or speech therapy may often be added to the mix. These services are provided regularly but are not considered intensive. *Intensive services* are those in which significant nurse or therapist time is involved. In cases where either enhanced or intensive services are provided, the potential for conflict between the medical nature of these endeavors and the social activities described above is likely to increase. Carefully orchestrating how these different types of activities can coexist without compromising one another is a very important consideration for an adult day program, and the design of the physical setting is central to achieving this goal.

Life as Activity

Our research and consulting experiences (Geboy et al. 2001) suggest that the daily life of an adult day center occurs within a highly predictable set of typical activities, which we term Realms of Activity. For the purpose of planning the activities for an adult day program, we suggest nine relevant Realms of Activity for ADCs that, in turn, relate to the two Strategic Orientations outlined above, Life as Activity and Health and Rehabilitation (figure 7.2).

Coming and Going

There are two constants that occur on a daily basis in adult day services: participants will arrive and they will depart. This is one of the primary differences between adult day centers and other care settings for the elderly and people with dementia, and it must be carefully considered. The transition from home to day center sets the tone for the remainder of the day. Zgola (1987) suggests that the van ride to the center is of such magnitude that a staff member, as a face familiar to participants, should be on board to ease the transition from home to day center. While this may not be possible at all centers, it does reflect the importance of the arrival experience. In develop-

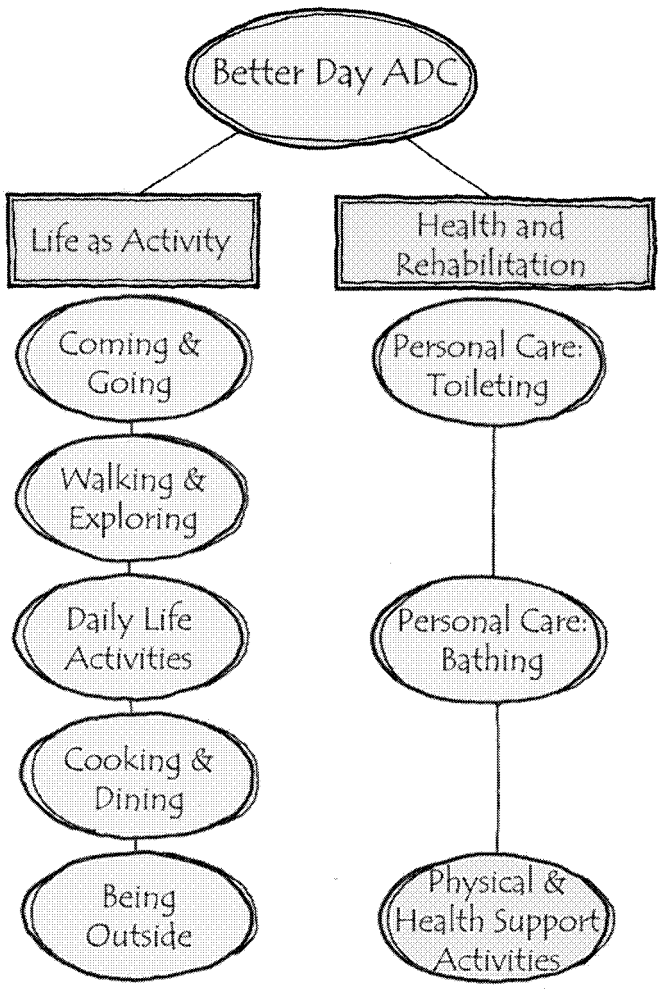

Figure 7.2. *Strategic orientations as they relate to the Realms of Experience found in ADCs.*

ing the arrival sequence, a care provider should consider both the duration of the participants' commute and its associated stress and discomfort. At day's end, when clients prepare to depart, agitation is often at its height. Therefore, it is essential to structure departures in a reassuring manner so as to minimize the clients' anxiety.

Walking and Exploring

Human movement is a central experience of life. People engage in movement to get somewhere or to explore—to "check things out." Yet too often in the world of dementia care, otherwise normal movement is judged a problem behavior and labeled "wandering." Rader, Doan, and Schwab (1985) offer the critical term "agenda behavior" and suggest that problematic behaviors such as wandering and resistance to care are actually outcomes of the individual taking action to meet some need. Zgola (1999) proposes that wandering could well be the participant's attempt at "escaping from an uncomfortable space; looking for something interesting; looking for something familiar; or feeling that you must be needed elsewhere because you are obviously not needed here" (115). From this perspective, wandering and elopement may be viewed, not simply as manifestations of dementia to be "managed," but rather, as the result of the meanings a participant interprets from her surroundings. Thus, wandering should be considered an opportunity for meaningful activity, not a problem.

Daily Life Activities

According to the Alzheimer's Association's *Key Elements of Dementia Care* (1997), the aim of activity programming is to focus on strengths and abilities of people with dementia. Hellen (1998) defines four broad types of meaningful activities: (a) movement activities, (b) thinking activities, (c) psychosocial activities, and (d) spiritual activities. *Movement activities* maintain physical strength and dexterity. Movement activities are so fundamentally different from the other three (e.g., requiring more room and energy exertion) that their environmental requirements vary as well. *Thinking activities* include such things as reciting familiar prayers, reminiscing, word games such as rhymes or ending a familiar adage, board games (perhaps modified), and creative writing. Service projects, such as putting together scrapbooks for children, or parties and conversation are all examples of *psychosocial activities.* Finally, *spiritual activities* include scripture reading and religious services. To fully realize the benefit of any activity and support day center participants most effectively, settings should be designed for these four types of activities, furnished and finished in ways that reflect the unique nature of each activity type to the best ability of the care organization.

Movement activities help support physical abilities. Inactivity leads to loss of function and strength, and affects the sense of well-being. Accommodations should be considered for exercising both large muscle groups and small motor skills. Equipment for physical activities in an adult day facility may include stationary bicycles; fitness balls and resistive bands, tubes, and pulleys; or bean bags and foam balls for catching. Exercise DVDs demand suitable audiovisual equipment. Walking and dancing remain important and natural movement activities. Adequate space for unrestricted movement of

several people at one time is critical to the success of physical activities. The environmental requirements of any planned movement activity must take into account the number of participants, their physical movements, the equipment in use, and equipment storage. All these elements must be carefully considered if the space is to adequately support movement activities.

Thinking activities require concentration, and distraction is highly problematic. Limiting group size as well as the size of the space within which the activity takes place are two strategies that reduce the likelihood of distraction. Limiting group size reduces the number of potential distractions and facilitates the full participation of each individual. This point relates to the concept of under- or overpopulating an activity (Barker 1968; Bechtel 1997). In a comparative case study of adult day centers, Diaz Moore (2000) found a common tendency to overpopulate adult day center activities: up to twenty-four participants were engaged in activities requiring only six to eight people. Because any given activity requires a limited number of roles, a "surplus" of participants may actually discourage engagement. When people feel unneeded, they may exhibit agitated behavior such as wandering or repetitive actions (Zgola 1999). In contrast, smaller activity groups are more likely to limit distraction and therefore enhance the likelihood of participant success.

Psychosocial activities range widely in terms of frequency, activity duration, and appropriate group size. Parties are typically large group events but occur sporadically (i.e., holidays and birthdays). On the other hand, intimate conversation happens consistently and often in groups of no more than four. Parties and sing-alongs may get loud; intimate conversation calls for quieter areas. All people seek out places congruent with the activities in which they wish to engage. The competence-press model of Lawton and Nahemow (1973) suggests that people with dementia often have a more difficult time in achieving that congruence between activity and setting. Because the psychosocial needs of the cognitively impaired are of utmost importance in therapeutic milieus (Cohen & Weisman 1991), it is critical that the physical setting has the potential to accommodate a range of social situations and that each activity setting appropriately cues the situation it serves. For those suffering from dementia, familiar design of the environment (furniture, lighting, color, decorations, etc.) supports the ability to cope (Küller 1991). Zgola (1999) sums up the dilemma: "If a dining room, for example, really sounds, smells, looks, and feels like a dining room, the person's attention to dining and his ability to eat will be enhanced. If, however, the room sounds like a fish market, smells like a craft room, looks like a bingo hall, and feels like a train station, what does a person do?" (79).

Spiritual activities range widely, from personal devotions and symbolic gestures to large group religious services. Their meaningful content, rich and integrally entwined with tradition and symbolism, sets these activities apart from others. Passive application of traditional religious symbols (i.e., a cross on a wall for Christians), however, may not serve as prompts for the cognitively impaired. In contrast, experiential expressions "that are perceptually and physically accessible; that involve activity, engagement and interaction; and that are based on cultural phenomenon" (Cohen & Diaz Moore 1999, 97) are more likely to be therapeutically meaningful for the cognitively impaired. Thus, successful physical and cognitive stimulation can be realized

through religiously oriented physical actions (often with props), such as saying the rosary for Catholics, davening (rhythmic chanting) during prayers for Jews, or kneeling and bowing on a prayer rug during salah (ritual prayer time) for Muslims.

Cooking and Dining

Cooking represents one of the archetypal activities of humankind (Spivak 1973). The preparation of food is often performed in a ritualistic manner; tasks are infused with meaning and significance. The activities of kitchen work generate familiar smells and tastes that serve as useful behavioral cues. "Home keeping" tasks—washing dishes, sweeping, or in this case, cooking and baking—are central to the identity of many individuals whose primary social role was homemaker. Because of their familiarity and proficiency with such activities, adult day center participants should be provided with opportunities for performing them; such performance helps participants feel competent and maintain a sense of self-worth. Kitchens serve as significant settings in which meaningful occupational therapy helps participants retain functional skills.

Dining is a major temporal landmark in the programs of most adult day centers. Day center dining may include breakfast and lunch, perhaps snacks, and possibly even dinner service. It is important to consider the character of the dining experience, how each meal or refreshment period may be thought of as different rather than similar. In the morning, clients typically arrive intermittently, and thus breakfast may be relatively informal and personal. Lunch, by contrast, may be the single point at which all clients gather during the day.

Despite its habitualized appearances, the activity of dining is a series of highly complex, interconnected tasks. Simplifying the activity and providing appropriate sequencing and cueing may well support a participant's functional independence for a longer time than otherwise possible. The physical environment is central to cueing. Tables of four or six afford manageable social interaction; familiar-looking tablecloths or placemats and plates; easily manipulated silverware; a location near the sounds and smells of the kitchen—all work together to cue the dining experience.

Assisting participants with eating requires considerable sensitivity. Handled insensitively, being fed can be a humiliating, diminishing experience and a powerful threat to personal well-being. Unfortunately, because mealtime assistance is such a time-consuming task, some care providers claim a client is not aware of what's going on. Declaring that the main goal is good nutrition, they rationalize a mechanical, "assembly line" approach. Given that dining is an integral part of daily life experience and thus central to adult day center, rationalizations of this sort are unacceptable. For additional suggestions on creating a pleasant and therapeutic dining experience for participants, see Hellen (1990, 1998) and Kovach (1997).

Being Outside

Nearly every person encounters the out-of-doors every day in some shape or fashion. Whether the activity is subtle, such as walking outside to get the newspaper, or more overt, such as gardening or taking a hike, the out-of-

doors provides a positive source of stimulation. Gerontological researchers acknowledge the significance of nature, particularly for those with dementia (Hoover 1995; Lovering 1990).

It is often argued that outdoor space and landscaping are expensive. In gerontological environments in particular, the use of outdoor space is minimal. This is disappointing because the cognitively impaired person residing in his or her own home becomes increasingly disengaged from the outdoors as a consequence of cognitive decline. The implication for adult day services is that any useable outdoor space should be visually integrated with the interior space, providing a view and/or connection to the out-of-doors. A pleasant view may be just the incentive necessary to persuade day center participants to venture outside.

Views of people are as important as views of the landscape. Nothing draws people as much as human activity, and staff must realize that outdoor space, like interior social space, requires creative activity programming. Taken together, well-thought-out landscaping, integrated views of nature, and engaging activities can all facilitate the beneficial use of outdoor space.

Health and Rehabilitation

Personal care (grooming, dressing, and toileting) is an integral aspect of daily life that relates to hygienic, social, and self-esteem issues. The inability to independently care for one's personal needs is a damaging blow to self-esteem and is often a cause for depression and irritability. People with cognitive impairment are often unable or unaware of the need to maintain hygienic practices. The capacity of an adult day setting to prompt personal care efforts is one clear example of how design can enhance the overall therapeutic milieu.

Personal care activities are truly personal and therefore demand smaller, more private activity settings. Without a doubt, people feel more comfortable and dignified when they can attend to their personal care in private. Of course, for many cognitively and physically impaired individuals, privacy is impeded by the need for various degrees of personal care assistance. Helping participants maintain their dignity despite their need for assistance is paramount. As Hellen (1998) asserts, "Caregivers' attitudes, approaches, and hands-on involvement in daily life care activities are essential" (87). Many pieces of personal care equipment—lifts, bathing units, and so forth—are unfamiliar, often loud and downright frightening, making it especially important that the setting and caregivers provide reassurance.

Personal Care: *Toileting*

Once people are toilet-trained as toddlers, they anticipate being able to privately manage this basic function for the balance of their lives. Yet incontinence is a common condition among older persons, particularly those with dementia. Episodes of incontinence are likely to be embarrassing, and the need for assistance to prevent episodes of incontinence or to help with self-cleaning is likely to lead to feelings of humiliation. Maximizing the independence of participants is essential in adult day settings, as is enhancing staff members' capabilities for providing care that supports such independence.

Adult day center toilets are frequently deficient in both number and type.

Staff members often have great difficulty providing appropriate assistance (such as two-person assists) in toilets supposedly designed for accessibility. Providing a range of toilet types adjacent to activity areas minimizes episodes of incontinence and facilitates timely and appropriate daily life care.

Personal Care: *Bathing*

The loss of bathing independence is difficult to accept, particularly because it is a personal and private activity. Thus, bathing is often a trying activity for care providers and care recipients alike. Attempting to trust the assistance of a relative stranger with one of the most private of activities may produce tremendous stress. This psychological stress is exacerbated by both the physical and cognitive limitations of many adult day center participants. As a consequence of age-related physical changes, many ADC participants need personal and mechanical bathing assistance; the body becomes less limber, muscles weaken, and the skin grows increasingly sensitive. Psychomotor deficits may undermine balance. These changes notwithstanding, participants often find it difficult to accept assistance because it represents a loss of independence. Moreover, the assistance itself can be frightening. Being lifted, naked, into a tub or shower via a mechanical lift is unsettling at best, terrifying at worst. It is not surprising, then, that many participants become agitated during bathing (Burgener et al. 1992; Cohen-Mansfield 1986).

Physical and Health Support Activities

In developing their 1997 standards and guidelines for the field, the National Adult Day Services Association (NADSA) recognized the evolving character of adult day services by moving beyond the clear dichotomy of social versus medical model (see chapter 1). NADSA's concept of levels of care emerged in response to still-current trends, including "the increase in acuity level and health care needs of participants, and the decrease in functional level and independence among those served" (NADSA 2002, 11). Thus, adult day services are now discussed in terms of core, enhanced, and intensive service provision. *Core services* include assessment and care planning; assistance with activities of daily living; health-related services; social services; therapeutic activities; nutrition; transportation; and emergency care. These core services, or the most basic level of care, extend beyond the "social model" and suggest that adult day services provide some range of health services. *Enhanced services* extend core services to activities such as restorative, supportive, or rehabilitative nursing care. Physical, occupational, or speech therapy may often be provided. These services are provided regularly but not intensively. The third level, *intensive services,* occur when extensive nurse or therapist time is involved. For example, a participant's medical condition may not be stable and may require regular monitoring or intervention by a nurse. The NADSA standards suggest that facilities serving cognitively impaired persons will most appropriately offer enhanced or intensive services. Rehabilitation and various ancillary therapies are thus best located within adult day center facilities and should be provided within spaces that are suitably and intentionally designed for these activities.

Choreographing the Daily Program

In compiling a daily activity schedule, the activity planner must juggle the capabilities of the physical setting, the number of clients and their interests and needs, and the number of staff available for activity facilitation—and do so in a way that reflects the mission, values, and goals of the organization. When planning a new facility, the design of the physical setting is an open question and thus affords opportunities for innovation and integration of program and setting that should not be missed.

The most successful innovation/integration occurs when the program is developed holistically, when individual activities work together to foster the outcomes sought by the organization. Similarly, the program should be designed to serve the clients holistically, meeting their physical, emotional, psychosocial, and cognitive needs. Thus the program should offer variety over the course of the day. Lindeman and colleagues (1991, 97) suggest that the activity program "should include a balance of large motor, fine motor, sensory and cognitive stimulation; sitting activities interspersed with movement activities; a prototype day that is regularly followed; scheduling of more cognitive tasks in the morning; and use special activities to reduce the 'sundowner effect,' which occurs each afternoon as participants become more agitated." Zgola (1987) suggests simply that the most demanding activities take place in the morning and hints that morning activities may be of longer duration than afternoon activities. Together, these recommendations provide a framework in which a planner might begin to "plug in" the activities that have been identified as best suited to furthering the goals the organization seeks to achieve. Once these key activities are laid out, they can be supplemented with additional desired activities to create a choreographed and meaningful daily routine. There is a rhythm to good activity programming, one that provides structure yet still allows improvisation.

Choreography of the day's activities accounts for the number of staff and participants involved in each activity, the activity's desired duration, and the most appropriate time of day at which to conduct the activity. To avoid problems associated with overpopulating, group size needs to be matched with activity duration. In general, no activity should last more than 60 minutes, and spatial transitions (movement from one space in the facility to another) should not be more than 90 minutes apart. Note that spatial transitions, rather than being viewed as disruptive, can and should be considered as opportunities for productive physical activity. Lindeman and colleagues (1991) also recommend that every activity have at least two staff members with the group—one to lead and one to assist.

With respect to participation, Hellen (1998), Lindeman and colleagues (1991), and Webb (1989) all declare it impossible to expect everyone to participate in one activity. Therefore, providing parallel programming or alternatives for those who simply do not want to participate in any given activity enhances overall program effectiveness. Choice prevents boredom (among staff as well as participants) and facilitates a sense of autonomy among participants. However, if parallel programming proves financially impossible at certain parts of the day, the program should at least afford the opportunity for participants to engage in independent activities such as playing cards, reading the newspaper, or drinking coffee with friends.

Certain activities have natural limitations with respect to the number of people needed to participate. Overpopulating (see discussion above) thwarts the therapeutic potential of the activity and frustrates participants: once those necessary roles are filled, any additional members of the group are coercively excluded from participating (e.g., Barker 1968; Bechtel 1997). Thus, activity programmers should take care to limit the number of participants to those who might be reasonably expected to engage in any given activity.

The time between activities, or transitions, is also critically important in adult day centers (Lindeman et al. 1991). They are vital components of a natural choreography of adult day program daily life and provide a sense of orientation for those with cognitive impairments. Transitions should be considered opportunities for participant activity: moving furniture, wiping tables, and gathering supplies all exercise physical and cognitive functions.

BOX 7.A
Activity Programming Tips

Tip: Activities scheduling
- Schedule more demanding activities in the morning, less demanding in the afternoon
- Morning activity periods may be longer than afternoon
- Alternate types of activities i.e., follow cognitive with physical activities, psychosocial with spiritual

Tip: Activities and transitions
- No activity should last longer than 60 minutes
- Think of transitions between activities as activities in themselves
- Schedule transitions between activities and between spaces at least every 90 minutes
- Transitional periods between activities should be 15–20 minutes in length, and no longer than 30 minutes

Tip: Parallel programming
- Whenever possible, provide alternative activities
- Officially recognize alternative activities in the form of parallel programming
- If parallel programming is impossible, at least provide opportunities for independent activities

Tip: Avoiding overpopulated activities
- Use commonsense judgment when assigning the number of participants to a given activity: How many people does the activity "need" in "real life?"

Tip: Eyes on the prize, not the schedule
- Focus on desired goals and outcomes for participants rather than sticking to the program schedule

	Recreation Room	Kitchen / Dining Area	Living Room	Personal Care	
7:30		Breakfast			Scheduled Bathing
		(Abby / Barbara)			*(Candace)*
8:15		Transition			
8:30		*(Abby cleaning Kitchen/Dining)*	Psychosocial Activity: Daily Headlines		Scheduled Bathing
			(Barbara / Candace)		*(Donna)*
9:00		Transition			
9:15	Cognitive Activity: Crafts		Cognitive Activity: Creative Writing	Floating Assistance	
	(Abby/Candace)	*(Helen preparing Snacks)*	*(Barbara / Elle)*	*(Fern/George)*	
10:15		Transition			
10:30		Snack		Scheduled Toileting	Scheduled Bathing
		(Candace / Donna / Helen)		*(Elle / Fern)*	*(George)*
10:45	Psychosocial Activity: Service Activity	*(Donna cleaning Kitchen / Dining)*	Being Outside: Puttering Outside		
	(Abby / Candace)		*(Barbara / Helen)*		
11:45		Transition			
12:00	Psychosocial Activity: Visit from Pets	Kitchen Work: Preparing the Dining Room	Cognitive Activity: Aromatherapy	Scheduled Toileting	
	(Helen)	*(Barbara)*	*(Donna / Iona)*	*(Jen)*	
12:45		Transition			
1:00		Lunch			
		(everyone except Helen)			
1:30		Transition			
1:45	Movement Activity: Physical Exercise (Group 1)	Kitchen Work: Cleaning the Kitchen	Cognitive Activity: Who's Who (Group 2)	Scheduled Toileting	
	(Helen)	*(Elle / Jen)*	*(Abby)*	*(Candace / Iona/ Fern)*	
2:15	Movement Activity: Physical Exercise (Group 2)	Kitchen Work: Baking	Cognitive Activity: Who's Who (Group 1)	Scheduled Toileting	Scheduled Bathing
	(Helen)	*(Barbara / Candace)*	*(Donna)*	*(Fern / George Iona / Jen)*	*(Elle)*
2:45		Transition			
3:00	Cognitive Activity: Sing-along (merge Recreation and Dining Rooms)				
	(Helen / Fern)				
3:45		Transition			
4:00		Snack			
		(Helen / Fern)			
4:15		Movement Activity: Preparing the Kitchen for Tomorrow		Floating Assistance	
		(Elle)		*(George / Helen)*	
5:00			Psychosocial Activity: News / Closing Time		
			(Elle / George)		

Figure 7.3. *Sample activity program for Better Day ADC*

Allow 15 to 20 minutes between activities for "changing gears" since transition periods of greater than 30 minutes tend to increase restlessness (Zgola 1987).

Finally, the key to a successful activity program is to allow interpretation and flexibility in achieving goals rather than strict adherence to the formal program (Webb 1989). The world of dementia care is an "immediate" one, where each and every moment affords an opportunity for maintaining dig-

nity. Care professionals need to be allowed to improvise as necessary, focusing on desired goals and outcomes rather than program schedule. Whether a certain activity is perfectly executed by the group is not nearly as important as the therapeutic effect of the entire day on each participant.

Figure 7.3 is a sample activity program for our hypothetical Better Day ADC. Recall that Better Day has ten direct care staffers; their assignments appear on the sample program by name. Three individuals work from 7:30 a.m. to 3 p.m.; one is scheduled from 8:30 a.m. to 4 p.m.; four work from 9 a.m. to 5 p.m.; and two part-time staffers work from 11:30 a.m. to 3:30 p.m. The staffing level shifts slightly mid-day to reflect the scheduled activities as well as breaks and staff lunch hours. Floating assistance during the busy transitional times of arrival and departure allows staff to provide help where and when it is needed most. Staff are allocated to scheduled toileting and bathing, which helps to ensure that these activities are carried out smoothly. Note that there are two or more activities scheduled concurrently between 9:15 a.m. and 2:45 p.m. Transition periods are 15 minutes in length and are no more than 90 minutes apart. Cognitive activities are scheduled for earlier in the day; the afternoon agenda is more heavily weighted toward psychosocial and movement activities.

Conclusion

The activity program is the lifeblood of adult day services. A well-crafted and implemented program goes a long way toward creating therapeutically beneficial days for participants and a sense of accomplishment for staff. Keeping a focus on the purpose of each activity for each participant and attempting to facilitate success in achieving that purpose is the cornerstone of quality adult day service. However, these purposes are often difficult to achieve and are made more difficult by a poor physical environment. In the following chapters, we introduce a design approach that integrates the physical setting with the activity program; such integration may engender therapeutic experiences for adult day center participants and satisfactory experiences for staff.

8.

Prescriptive Patterns to Facilitate Life as Activity

The preceding chapter discussed innovative and therapeutically goal-oriented activity programming in adult day services. Planning for such programming has been a core issue in adult day services for years, as evidenced in numerous publications (e.g., Lindeman et al. 1991; Nissenboim & Vroman 1997; Webb 1989). However, all human activity takes place somewhere, and place influences activities. Unfortunately, all too often adult day centers treat the physical setting as a given, a constraint to which the program and people (participants as well as staff) must adapt. This approach stems from both the strained financial streams associated with adult day services and the understandable focus on "program"; but in effect, it gives the physical setting a "pass," shortchanging its integral role in supporting therapeutic place experiences.

As presented throughout this book, the physical setting plays an integral role in facilitating therapeutic outcomes. It does so both in the way it spatially organizes relationships between people and by virtue of its experiential qualities (or "personality"). When the spatial organization of the setting as well as its personality are consistent with and facilitate the organization's program of activities—and the desired qualities of those activities—the setting will fit more tightly with the programmatic intentions and be more likely to facilitate the activities and their anticipated therapeutic benefits.

Environmental fit is increasingly salient as a participant's competence becomes compromised. More than three decades ago, Lawton and Simon (1968) hypothesized that the less competent the individual, the greater his or her susceptibility to the impact of the environment. This gave rise to Lawton and Nahemow's Ecological Model of Aging (EMA) (1973), which Scheidt and Norris-Baker (2003) identify as the conceptual cornerstone of environmental gerontology. Figure 8.1 illustrates the key premises of the EMA, which suggest that as a person's competence is diminished, not only is environmental press less manageable, but the range of environmental press within which one may effectively operate is also diminished. In essence, the more compromised the competence of the individual, the less demanding the environment needs to be; and concomitantly, environmental resources need to more closely match the needs of the person. Environmental fit occurs in ADCs when all three components of the Model of Place—people,

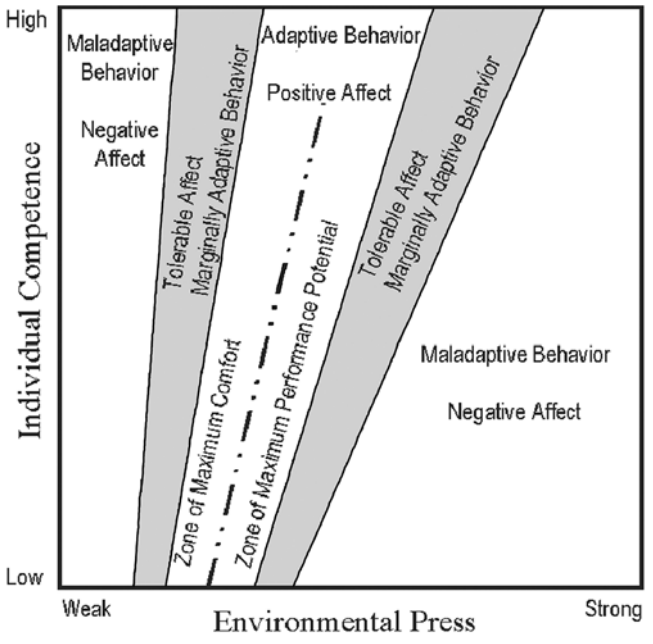

Figure 8.1. *The Ecological Model of Aging. Adapted, by permission of the publisher, from M. P. Lawton and L. Nahemow, "Ecology and the Aging Process," in* Psychology of Adult Development and Aging, *ed. C. Eisdorfer and M. P. Lawton (Washington, DC: American Psychological Association, 1973).*

program, and physical setting—are compatible and in balance with one another.

Integrating Program and Setting

When conceptualizing environmental fit, then, it is necessary to consider not only people and program but also the place where the program, or activities, are to occur. If care is taken to craft a program of activities that achieve certain goals, then certainly equal care should be taken to design settings or places that support the goals. The sample activity program described in the previous chapter (figure 7.3) demonstrates the importance of place: the activity schedule is organized not only according to time but also according to setting. Reciprocity or congruence between setting and human activity is especially important for adult day centers because it optimizes the possibilities for achieving therapeutic goals.

Activities are not compartmentalized but occur within a sequenced system of activities. Thus, to create a setting that supports activities, it is as important to understand the system or sequencing of activities as it is to understand each individual activity. In other words, the entire physical setting needs to consist of a system of settings that is congruent with the entire system of activities (cf. Rapoport 1990). Moreover, the setting needs to accommodate activity-related spatial needs, the space that people need as they perform activities, plus space for supplementary activity "props."

Systems of Activities

In chapter 7, we identified eight ADC Realms of Activity:

- Coming and Going
- Walking and Exploring
- Daily Life Activities
- Cooking and Dining

- Being Outside
- Toileting
- Bathing
- Physical and Health Support Activities

While the list is not all-inclusive, addressing these eight realms efficaciously in terms of both programming and design would go a long way toward fostering better quality of life experiences for ADC participants. Each realm of activity is constituted, not by a single act, but rather by a constellation of associated streams of behavior organized and enacted by people in an effort to achieve their end purpose. Typically, these patterns of behavior are habitualized to the degree that people engage in them unconsciously (Berger & Luckmann 1966) yet successfully. For cognitively impaired persons, however, issues of apraxia and compromised executive functions increase the likelihood that the more involved the decision sequence and behaviors, the less likely it is that the individual will achieve success. This has led to the suggestion in dementia care to break down complex activities into more manageable tasks that are then orchestrated with the assistance of the care provider in necessary sequence; this approach helps participants achieve overall activity success (e.g., Hellen 1998; Alzheimer's Association 1997). Hence, the notion of a *system* of activities should be familiar to most care professionals.

Systems of Settings

This same type of systems thinking needs to occur in order to achieve fit between the program of activities and the physical setting. Once a system of activities is identified, a system of settings that orchestrates spatial organization and human activity in a congruent fashion needs to be mapped out. This mapping may be related conceptually to the Critical Path Method (CPM), a project management method that models the sequence of networked activities related to completion of a project. In project management, the critical path is typically that sequence of activities that collectively require the greatest duration of time. In spatial organization, the critical path is that sequence of settings essential to successfully achieving the end purpose of the activity. Additional settings would be associated with related activities that are likely to or might occur. Thus, the sequence of essential activities, likely activities, and possible activities informs the development of the sequence of settings within which the system of activities will take place.

Spatial Requirements and Design Responses

Once an overall system of settings is developed, then issues of space—density, configuration, volume, access—and physical elements—enclosure, furnishings, equipment, props—can be addressed for each setting. Again, these design decisions need to ensure reciprocity between program activities and setting. Throughout this negotiating of the schematics of design, the key questions to ask are Who does what, where, when, and why? Answers to these questions inform the design responses that we referred to in chapter 1 as "prescriptive patterns." The response to the why question becomes critical, for it sets the intentions in relation to which the design decisions should be evaluated.

Negotiation: The Process of Architectural Programming

The preceding outline suggests that the translation process, or moving from activity programming to architectural programming, begins with a focus on the Realms of Activity presented in the previous chapter. These activity realms need to be understood as systems of activities involving various people with various needs of varying degrees at various times; the activities, however, must be orchestrated to achieve certain purposes (or meet certain needs). Thus a first step in architectural programming is to identify the likely activity needs of all those involved (participants, family, staff, organization) and clearly articulate the intentions associated with the activity. The second step is to identify the full system of activities that constitute the Realm of Activity and translate that system into a conceptual organization of settings that would enable and maximize the sequencing of those activities. The third step examines that organization and defines the spatial requirements necessary for maximizing the intentions of each activity.

Following this method, we have developed a set of normative patterns (cf. Alexander et al. 1977) that support the therapeutic enhancement of adult day services for the cognitively impaired. Figure 8.2 is a "concept map" that

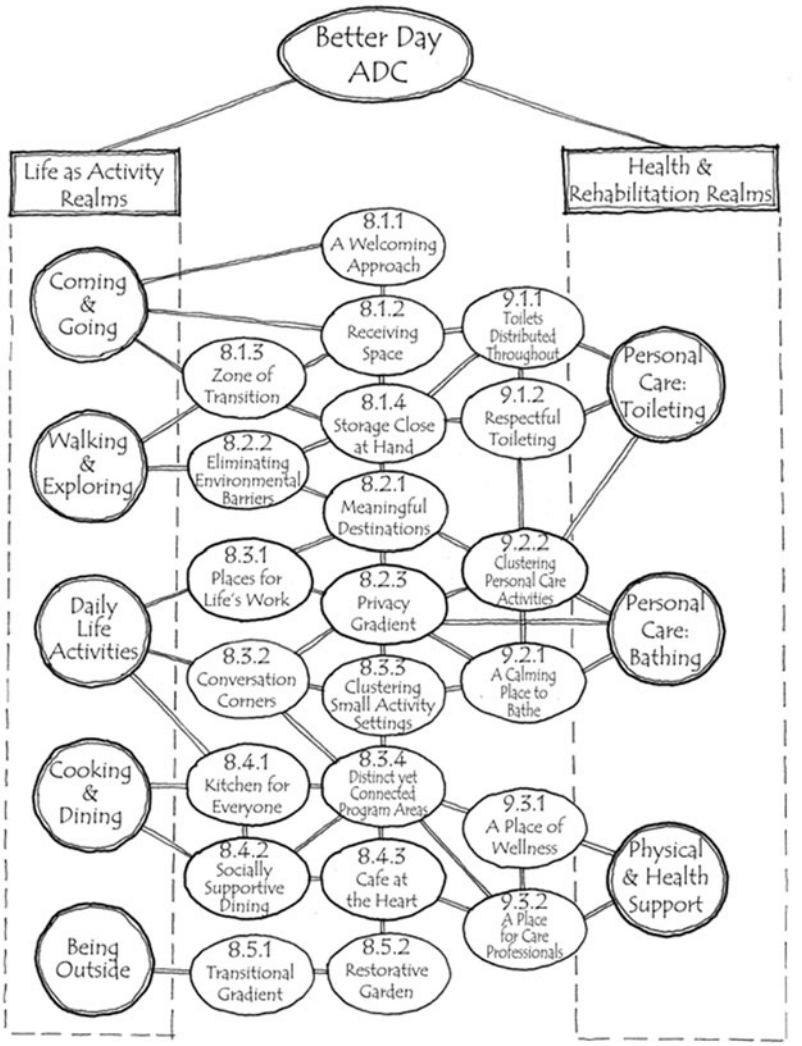

Figure 8.2. *Concept map relating strategic orientations, activity realms, and patterns for design*

depicts the relationships between the two Strategic Orientations, the eight Realms of Activity, and twenty-two patterns that are central to the provision of care in a dementia-capable adult day facility. These twenty-two patterns reflect activity-setting combinations most relevant to adult day services and with the greatest potential for therapeutic enhancement. Not every pattern may be appropriate for every adult day care facility. Rather than absolute design requirements, the patterns illustrate and inform the process through which an ADC development team may generate its own patterns, predicated on those attributes of place experience deemed most appropriate for their facility.

The patterns are organized into two chapters: chapter 8 addresses patterns supportive of the strategic orientation Life as Activity, and chapter 9 addresses patterns related to Health and Rehabilitation. As a collection, the twenty-two patterns account holistically for the life of a place of adult and dementia day care, a place for better days for all involved.

Our intent is for these patterns to serve as the basis for architectural programming, pattern generation, and ultimately, for the creation of enhanced, dementia-capable therapeutic environments for adult day service centers. Furthermore, we hope that ADC development teams will use this outline as they work through their own process from activity programming to "place making." Place making is a site and context specific activity demanding negotiation with local factors. Thus we would like to underscore our assertion that the patterns in this chapter are not the final word, but rather they are meant to be a useful beginning repertoire—one that should evolve over time and with experience.

Realm of Activity: Coming and Going

The daily experience of coming to and going from an adult day service center is essential to the definition of adult day services itself. The transition from home to day center sets the tone for the remainder of the day, and the transition from day center to home leaves a lingering aftertaste not only with the participant but also with their loved ones. The choreography of these two reciprocal activities is critical to seamless transitions, which go a long way toward creating better days.

Family caregivers want to drop off their loved ones in a way that effectively signals the transition from home to day care. At departure, a family member seeks confirmation that the day has provided a satisfying therapeutic experience. A personalized approach to staff-participant interactions breeds the supportiveness required for successful days. The importance of these adult day care experiences cannot be overestimated, although they do place tremendous demands on staff, particularly because many adult day programs reduce staffing patterns early in the morning and late in the afternoon. This presents a human resource issue for the organization that should be considered carefully. Creative responses may include use of volunteers, flexible scheduling, or innovative partnering with other community organizations.

Coming and going transitions are likely to produce stress and anxiety in participants with dementia. Ease of orientation and the provision of appropriate stimulation are essential to a successful arrival. A clear sense of loca-

tion and expectations reduce anxiety and provide reassurance. If a day begins with high stress, the Progressively Lowered Stress Threshold (PLST) model (Hall & Buckwalter 1987) suggests that the level of stress to which that participant can adapt is significantly reduced. Easing transition by allowing a participant the time, space, and support to incrementally adapt to higher (and lower) stimulation program spaces may facilitate a "recharging" of a participant's stress threshold, thus making it possible for him or her to effectively engage in the activities of the day. Coming and going are processes of transition; as suggested by Nancy Mace (1987), the goal should be "soft transitions."

Relevant experiential attributes for Coming and Going:

- Orientation
- Safety and Security
- Supporting Functional Independence
- Architectural Delight

System of Activities

Before even arriving at the adult day center, the participant has most likely been through a series of potentially demanding experiences in the home, beginning with getting out of bed, getting washed and dressed, and perhaps eating breakfast. How did these activities go? By all signs, is it likely going to be a bad day or a good day? When did the participant wake up? How did she sleep? What did he eat and how much? Did she take medications? When was the last time he went to the bathroom? By talking about these concerns among themselves, the caregiver, participant, and care professional mediate the stress associated with arrival and departure transitions.

Adult day center design considerations should begin with the moment the participant exits the vehicle. With this delimitation, the activity realm that we call Coming and Going includes at least nine activities that constitute its system of activities:

1. Transfer out of vehicle (essential)
2. Locomotion toward entry (essential)
3. Entry (essential)
4. Welcome/Goodbye (essential)
5. Talking/Visiting/Resting (likely)
6. Transfer of "stuff" (coats, prosthetic devices, supplies) (likely)
7. Storage of "stuff" (likely)
8. Toileting (possible)
9. Transition into program (essential)

System of Settings

As seen in figure 8.3, Pattern 8.1.1 (A Welcoming Approach) facilitates activities 1 through 3. Pattern 8.1.2 (Receiving Space) serves activities 4, 5, and 6 while Pattern 8.1.3 (Zone of Transition) serves activity 9. Together, these three patterns constitute the sum of activity-settings that serve the essential activities of Coming and Going. Patterns 8.1.4 (Storage Close at Hand) and 9.6.1 (Toilets Distributed Throughout, described in chapter 9) serve functionally supportive activities associated with activity 7 (storage of

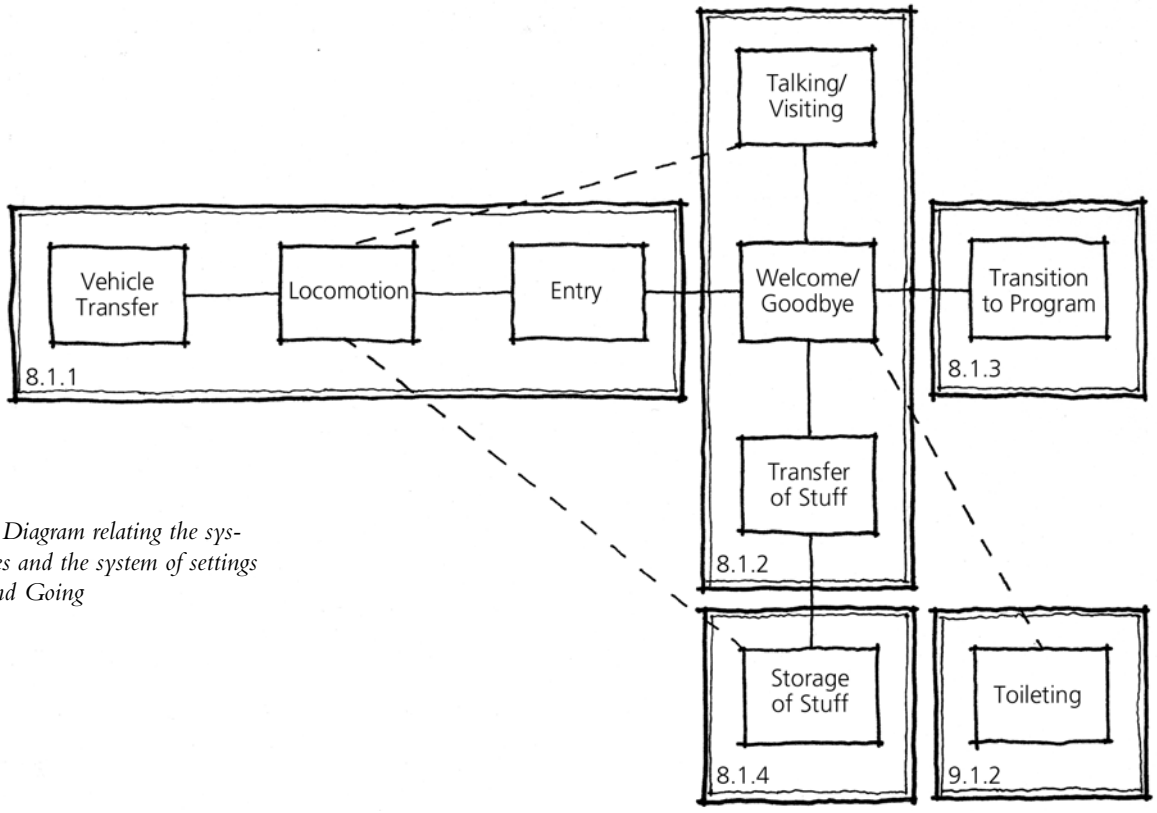

Figure 8.3. *Diagram relating the system of activities and the system of settings for Coming and Going*

stuff) and accommodated within Pattern 8.1.4 and toileting within Pattern 9.1.1.

Pattern 8.1.1. A Welcoming Approach

Problem Statement

The effectiveness of adult day services rests in large part on positive arrival and departure experiences. Yet these experiences are often problematic for participants, evoking feelings of apprehension and loss of control. Coming and going should reassure participants, convey a sense of belonging, and help them feel safe and competent. The first and final experiences of each day shape lasting impressions and for that reason need to be as pleasant as possible.

Spatial Requirements

Adult day services participants are likely to arrive as passengers via van or automobile, although other possibilities may occur. To ease drop-off as much as possible, a single direction for auto travel is preferred so that no participant needs to cross traffic upon arrival. Provide a vehicular access space of no less than 24 feet in length and a minimum of 4 feet in depth adjacent to the main single direction drive for participant drop-off. Both the drive and the access space should be demarcated from pedestrian circulation by a curb as well as by a greenway of at least 30 inches in width and preferably 5 feet in width. There should be a gradual ramping from the access space to the height of the pedestrian sidewalk, preferably with textured concrete to clearly indicate it as a distinct zone. Ideally, transfer, locomotion, and entry

BOX 8.1.1
Notes on A Welcoming Approach

Realm of Activity:
- Coming and Going

Key Experiential Attributes:
- Orientation
- Safety and security
- Supporting functional independence
- Architectural delight

Activities to Be Accommodated:
- Transfer out of vehicle (essential)
- Locomotion toward entry (essential)
- Entry (essential)

Anticipated Pattern Benefits:
- Greater likelihood of beginning and ending the day with successful experiences
- Reduced anxiety and agitation among participants
- Enhanced sense of belonging

should all occur under an overhead shelter such as a porte cochere. If such an overhead structure is provided, carefully consider the dimensional clearance requirements of all vehicles that need to pass under that overhead structure, including transit vans and emergency vehicles.

Once transfer from the vehicle to the ground plane is accomplished, issues of locomotion need to be addressed. Pedestrian sidewalks should be 6 feet wide at a minimum, and ideally 7.5 feet wide, with 9 inches of textured concrete on each side to aid orientation for the visually impaired. A place of rest should be provided within 15 feet of the point of vehicular transfer for both ambulatory participants and those that are wheelchair-assisted. Since overhead canopies may create an area of significant darkness, provision of daylight-sensored luminaires should be considered.

As one enters a facility, the door should meet ADA requirements in regard to weight, speed of closure, door handle, and so forth. Door width is becoming an increasingly significant decision as wheelchairs have changed in shape and dimension (e.g. motorized, angled wheels) since the ADA requirements have emerged. Airlocks at building entries are good ideas; however, many participants will be assisted in one way or another, and therefore more space is needed than might be required in other airlocks. The act of entry is a transitional condition and therefore may prompt negative reactions. Providing a place to rest may be a very good idea.

Design Response

A Welcoming Approach (figure 8.4) provides an identifiable entry that consists of a series of external and internal transitions that together incremen-

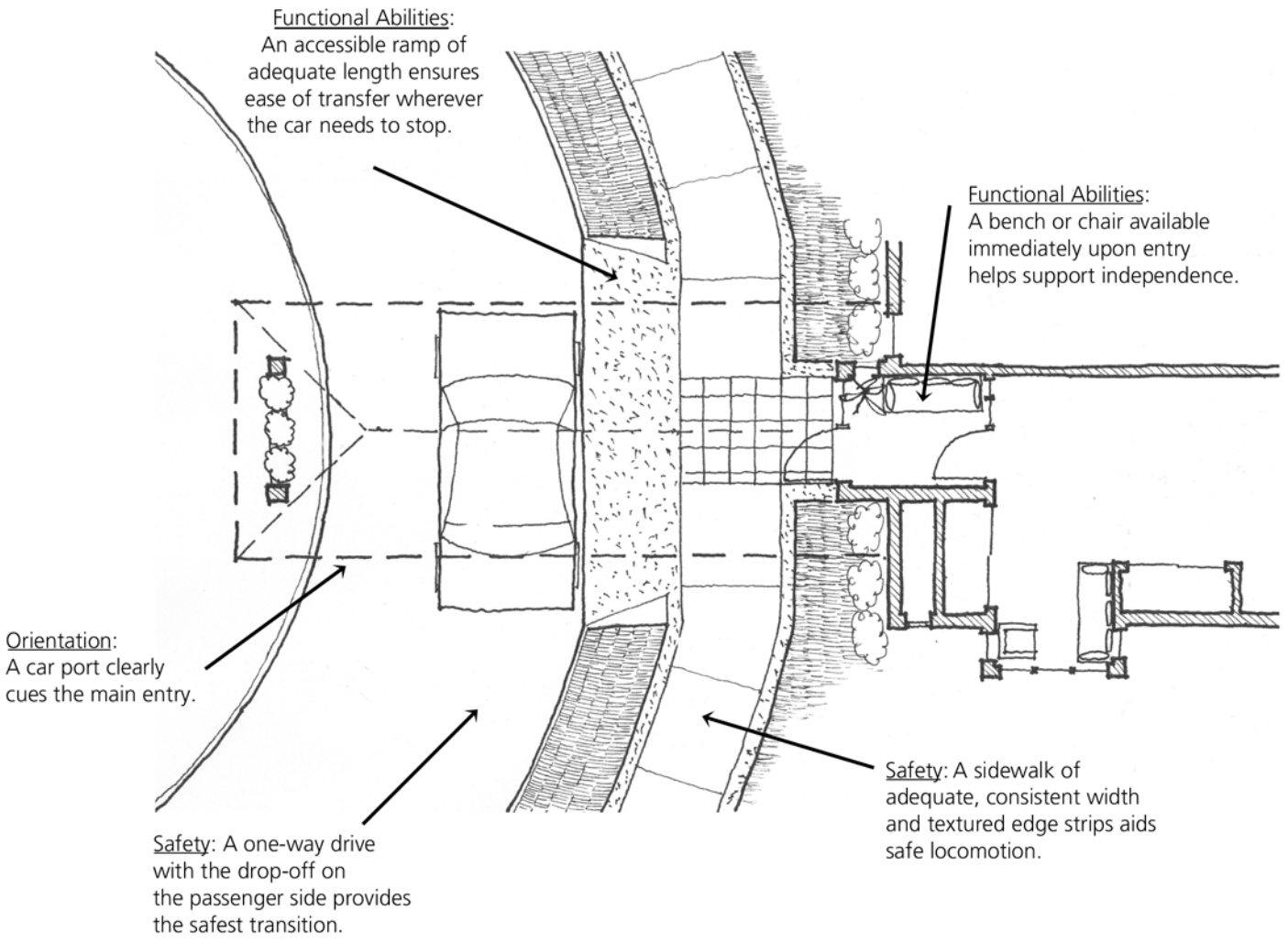
Functional Abilities:
An accessible ramp of adequate length ensures ease of transfer wherever the car needs to stop.
Functional Abilities:
A bench or chair available immediately upon entry helps support independence.
Orientation:
A car port clearly cues the main entry.
Safety: A sidewalk of adequate, consistent width and textured edge strips aids safe locomotion.
Safety: A one-way drive with the drop-off on the passenger side provides the safest transition.

Figure 8.4. *A Welcoming Approach*

tally signal the progression from community life to adult day service participation. Because first impressions do count, the building's exterior should make a positive statement about the organization and its philosophy of care. The facility entrance should be clearly marked and obvious from the street. It should be of an appropriate human scale. If the building mass is significant, then it is important that the building form cascade down to a comfortable human scale at the entry.

The path from vehicle to front door is of critical concern. This sequence should, at minimum, include these four features: (1) identifiable and buffered pedestrian and vehicular paths; (2) the environmental attributes of the pedestrian path accommodating the level of need of the participants (width, material, enclosure, etc.); (3) an area in which those paths provide shelter from the weather and in which there is a place for rest; and (4) a transitional space that provides a threshold between outside and inside.

This transitional space should straddle both exterior and interior environments, easing the progression from outside to inside and being solely dedicated to that transition. This space should provide an opportunity for sitting and rest in case of physical or cognitive fatigue or apprehension. As is found in traditional residential design, there should be "a layering of places that range from completely interior to partly exterior to completely exte-

Figure 8.5. *Part of a welcoming approach is to maximize the given site amenities. This design takes advantage of existing trees to provide an enhanced sense of sanctuary.*

rior" (Susanka 1998, 84). Each of those layers reinforces the cueing capacity that supports a series of perceptual experiences necessary for reorientation, thereby creating "soft transitions."

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Pattern 8.1.2. Receiving Space

Problem Statement

For persons with dementia, coming and going transitions can engender psychosocial problems. For this reason, effective, positive social exchanges are key to alleviating or eliminating negative outcomes such as agitation. Salutations are one of the more habitualized and positive aspects of social life and thus portend great potential for ensuring that participants navigate the coming and going transition successfully. Since the cognitive abilities of many in-

BOX 8.1.2
Notes on A Receiving Space

Realm of Activity:
- Coming and Going

Key Experiential Attributes:
- Orientation
- Safety and security
- Supporting functional independence
- Architectural delight

Activities to Be Accommodated:
- Welcome/Goodbye (essential)
- Talking/Visiting/Resting (likely)
- Transfer of "stuff" (coats, prosthetic devices, supplies) (likely)

Anticipated Pattern Benefits:
- Greater likelihood of beginning and ending the day with successful experiences
- Reduced anxiety and agitation among participants
- Enhanced sense of belonging

dividuals are taxed simply by the sequence of activities that precede arrival and departure, it is important to minimize transition distractions by paying particular attention to the one-on-one social exchange between receiver and participant. Gently orienting the participant to subsequent activities such as resting, coat removing, toileting, and so forth is critical. Coming and going are seams between defined social situations and are therefore intrinsically tenuous. The setting and the social exchange must reinforce participants' sense of psychological security.

Spatial Requirements

Arrival salutations set the tone for or orchestrate the entire day. Departure salutations do the same for the participant's evening. As an interaction of affiliation and attachment, interpersonal distances for such exchanges are rather intimate, often involving physical contact (e.g., a handshake, a hug). Such interactions should be one-on-one and oriented toward meeting the needs of the arriving participant. We do this quite naturally in our homes, where we often ask our guests for their coats and escort them to a place amenable to social exchange.

It is important that immediately upon entry, a staff member or volunteer approach and welcome each participant personally. Since participants often arrive in groups (via vans), once they have been welcomed personally, they need to be transitioned to two additional welcoming areas, one where they can visit with each other, and a second area where they can store personal belongings. This process facilitates a relatively smooth process, allowing for

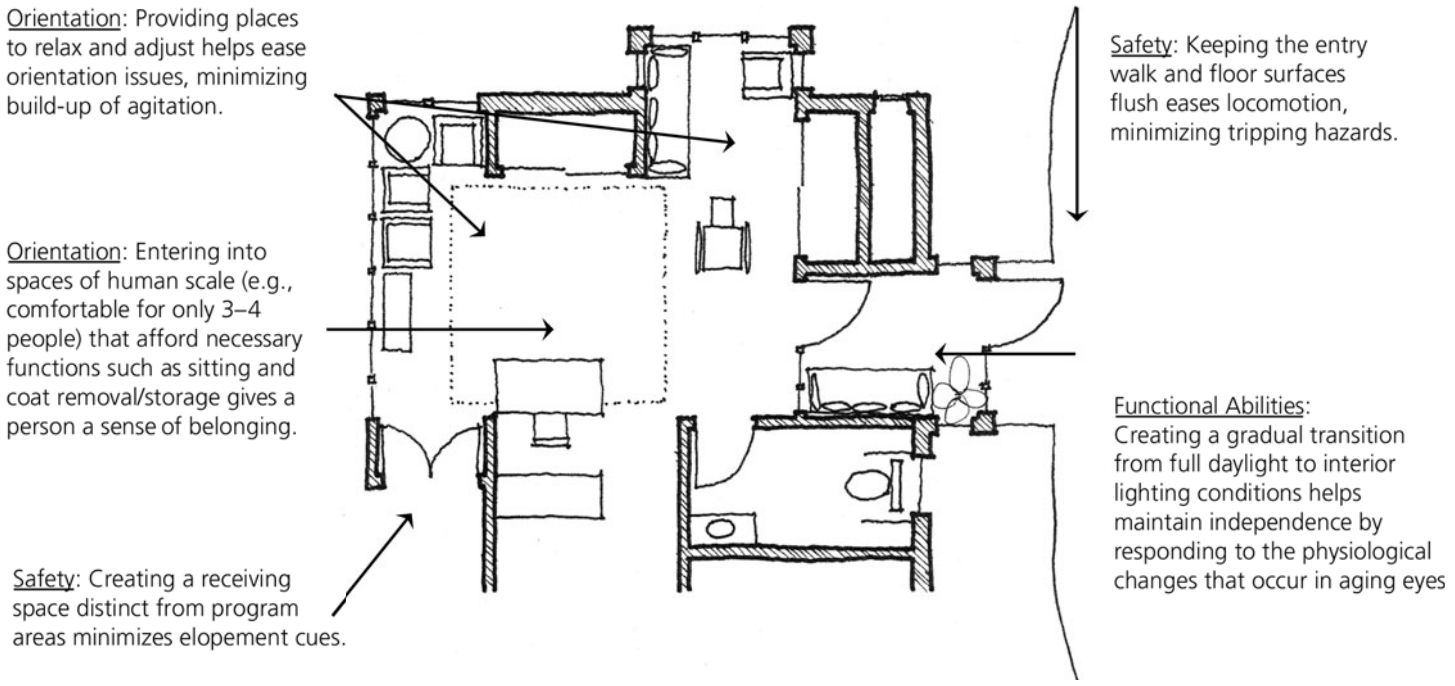
Orientation: Providing places to relax and adjust helps ease orientation issues, minimizing build-up of agitation.
Orientation: Entering into spaces of human scale (e.g., comfortable for only 3–4 people) that afford necessary functions such as sitting and coat removal/storage gives a person a sense of belonging.
Safety: Creating a receiving space distinct from program areas minimizes elopement cues.
Safety: Keeping the entry walk and floor surfaces flush eases locomotion, minimizing tripping hazards.
Functional Abilities: Creating a gradual transition from full daylight to interior lighting conditions helps maintain independence by responding to the physiological changes that occur in aging eyes

Figure 8.6. *A Receiving Space*

rapid transitioning of continuously arriving participants. The area required for welcoming activities is dependent on both the overall census of the program and the projected number of participants that may arrive simultaneously. The welcoming or sitting area for visiting should have furniture arranged in a sociopetal fashion (typically in "L" or "U" configurations) and should facilitate natural placement of wheelchairs into the sitting groups. Selection of furniture in relation to gerontological ergonomics is essential. A large enough area, out of the flow of traffic, and one that does not encroach upon the welcoming or visiting activity settings, should be provided for the transfer of participant "stuff." It is important to consider the possible items this might entail, including outdoor garments, boots, change of clothes, and a range of prosthetic devices.

Design Response

A Receiving Space (figure 8.6) immediately inside the entrance includes a series of welcoming elements. A friendly and personal greeting, a vase of fresh flowers, and a restful little corner in which to catch one's breath or freshen up provide elements that signal that one is welcome in this place. This is a setting within which a person is greeted, is assisted with coat and boots, and in which family caregivers can reassure and share their goodbyes. The reception area should be separate from the primary program space and not visually accessible from it. The reception area should be of sufficient size to accommodate several people (including space for wheelchairs) and the activities of coming and going such as removing coats and boots. There should be places for people to sit and relax, and both a toilet room and necessary storage space adjacent to the reception area. Since there are times when care professionals need to confer with staff away from the participant, it is a good idea to create a spatial link between the receiving spaces and administrative offices.

Figure 8.7. *Receiving places need a place for someone to welcome arrivals and places to sit, and should provide visual connection to both inside (what awaits the arrival) and outside.*

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Pattern 8.1.3. Zone of Transition

Problem Statement

ADC participants are easily agitated during coming and going transitions. When closets or exit doors lie within program participant view, for example, and participants can see other participants don or remove coats and enter or exit, they often grow anxious. Easing transition by affording participants time and space to incrementally adapt to different areas and reducing cues that may trigger adverse activity (such as elopement) are essential.

Spatial Requirements

One of the greatest difficulties associated with the dementia experience is transitioning from one situation and its set of expectations to another situation and a new set of expectations. No doubt this is due to difficulties associated with orientation and social cognition. This is why Mace (1987) stresses the importance of "soft transitions." Shifts from one setting to another should be gradual rather than abrupt. This is true not only in relation to entry to program space but also between program spaces themselves. For example, once a participant walks through a doorway, he or she immediately becomes part of the new setting and often becomes the point of focus. Imagine a student arriving late for a lecture, and this experience should be clear. For people with dementia, this experience will likely elevate anxiety; they have been rapidly thrust into (or committed to) an activity-setting to which they need to be slowly oriented. Thus, an important part of gradual transi-

BOX 8.1.3
Notes on Zone of Transition

Realm of Activity:
- Coming and Going

Key Experiential Attributes:
- Orientation
- Safety and security
- Supporting functional independence
- Architectural delight

Activities to Be Accommodated:
- Transition into program (essential)

Anticipated Pattern Benefits:
- Reduction of agitation stemming from the regulation of stimulation
- Enhanced safety and security from reduced agitation and elopement potential
- Less disruption of activities from people coming and going, enhancing social interaction

tion is the concept of "previewing," providing visual access to an activity-setting prior to the act of committing to it. The subtle addition of glass to a door, for example, allows for previewing or an opportunity for the participant to see the space before committing to it.

A threshold transition may be made more gradual by providing additional space, and therefore additional time, to the transition process. Providing a protected space on one or both sides of such a threshold eases the exposure to the stimulation associated with the activity-setting. This is particularly important where settings have quite different stimulation levels (i.e., quiet to loud). An alcove or inglenook, as protective space, will provide an opportunity for previewing and stimulation sampling prior to full commitment to the setting and its activity. This gradual transition toward commitment can be enhanced when the activity occurs in a setting that is oriented away from, or at least perpendicular to, the point of entry. Such a spatial arrangement also reduces the likelihood of new arrival or departure disruptions. In many adult day service settings, this arrangement is particularly salient at departure times.

Design Response

Zone of Transition (figure 8.8) refers to a spatial "buffer" between entry spaces and program spaces as well as an experiential "buffer" that signals the transition from home to day care program. The entry and reception area should be separate from the primary program space and not visually accessible from it. Security measures within the transition zone should be discreet in appearance and tone to avoid conveying an institutional impression. The transition zone should, at minimum, be characterized by these features:

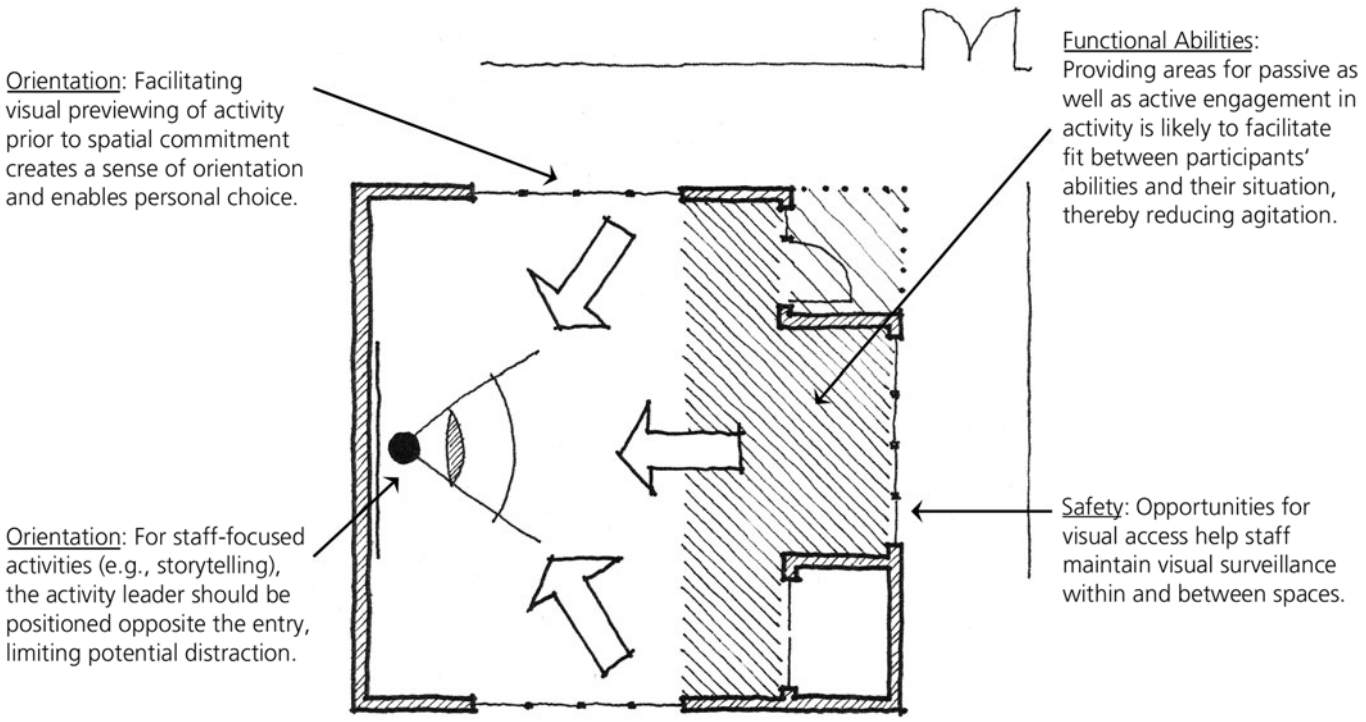
Orientation: Facilitating visual previewing of activity prior to spatial commitment creates a sense of orientation and enables personal choice.
Functional Abilities: Providing areas for passive as well as active engagement in activity is likely to facilitate fit between participants' abilities and their situation, thereby reducing agitation.
Orientation: For staff-focused activities (e.g., storytelling), the activity leader should be positioned opposite the entry, limiting potential distraction.
Safety: Opportunities for visual access help staff maintain visual surveillance within and between spaces.

Figure 8.8. *Zone of Transition*

(1) a buffered entry, (2) opportunities for visually "previewing" program areas, and (3) activities conducted at some distance from points of entry and exit.

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Pattern 8.1.4. Storage Close at Hand

Problem Statement

Adult day services offer a range of activities, each with different characteristics requiring different props and supplies. Storing such props and supplies in a visually accessible location makes it more likely that they will be utilized and enhances their cueing potential. A cue is a signal that guides, prompts, or reminds one of appropriate and expected behavior.

It is difficult to calculate the amount of space needed for storing props and supplies, especially since props and supplies vary according to activity. Because of this difficulty adult day service centers often end up storing such items in "left over" spaces, where nothing else particularly fits, or in one centralized location. Yet, if not well planned for, storage location can make or break the therapeutic intentions of the setting as well as diminish staff efficiency. The further the necessary activity material is from the activity, the

BOX 8.1.4
Storage Close at Hand

Realm of Activity:
- Coming and Going, Daily Life Activities, Personal Care: Toileting, Personal Care: Bathing

Key Experiential Attributes:
- Orientation
- Safety and security
- Supporting functional independence
- Architectural delight

Activities to Be Accommodated:
- Storage of "stuff"

Anticipated Pattern Benefits:
- Enhanced staff efficiency
- Potential to enable greater independence on behalf of participants
- More efficient use of space
- Enhanced ability to define activity settings with appropriate furnishings and props

less likely it is that staff will use the materials or that participants will be able to access such material independently.

Spatial Requirements

It is essential to provide readily accessible storage accommodations for such things as garments, personal care items, and prosthetic devices upon entry. Coat racks should provide three inches of length per person (using maximum daily census figures); if hats and the like are to be stored on hangers as well, a bit more space needs to be provided. Each participant should also have a personal storage area for changes of clothes, personal care items, and so forth. Milk crates can serve this purpose fairly effectively. In certain climates, the provision of storage for boots is also a necessary consideration. Often a couple of rows of shelves below the coat rack can be dedicated to this purpose. Similarly, unutilized space under shelves can serve as storage space for wheelchairs and walkers.

In program and support spaces (e.g., toilet rooms), it is essential to provide appropriate amounts of either built-in or freestanding storage space for activity or support props. Storage spaces may be secured (locked) and visible, or unsecured but out of view. Typically, a mix of storage types can be employed in support of each activity setting.

Design Response

Storage Close at Hand (figure 8.9) conveys the concept of providing a range of storage areas within each facility setting. Personalized, secure storage

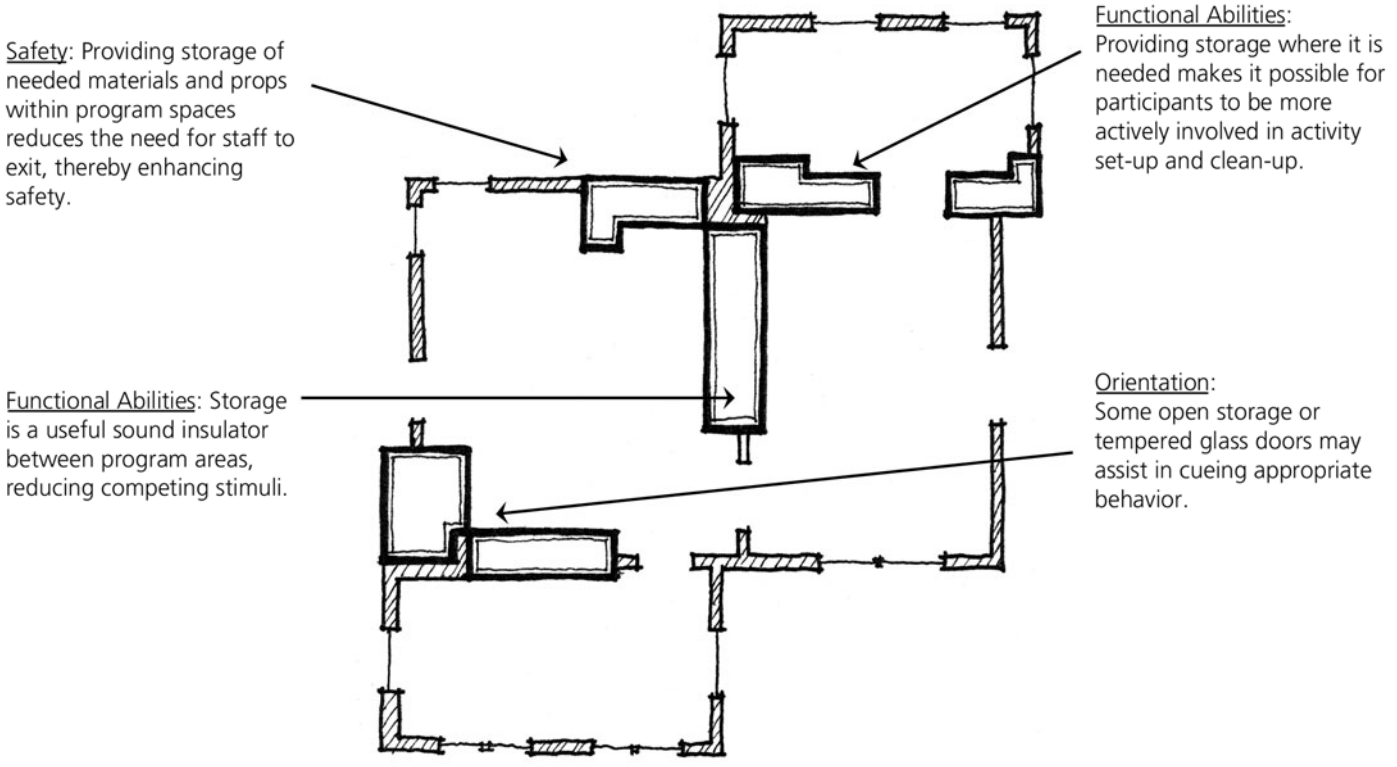
Safety: Providing storage of needed materials and props within program spaces reduces the need for staff to exit, thereby enhancing safety.
Functional Abilities: Providing storage where it is needed makes it possible for participants to be more actively involved in activity set-up and clean-up.
Functional Abilities: Storage is a useful sound insulator between program areas, reducing competing stimuli.
Orientation: Some open storage or tempered glass doors may assist in cueing appropriate behavior.

Figure 8.9. *Storage Close at Hand*

should be provided for each participant's personal items (such as a handbag or a change of clothes) and conveniently located near the entry to ensure easy access for family members and drivers. There should be adequate storage for wheelchairs that are not used during the day. Coat closets and personal storage should be located between the reception area and the primary program spaces. Storage Close at Hand should, at a minimum, be characterized by: (1) decentralization, (2) convenience, and (3) sufficiency in terms of size. Some storage should be visually accessible so that the latent meaning of the objects may assist in cueing appropriate setting-related behavior. Accessible storage could be in the form of bookcases, plate rails, open cabinets, or cabinets with glass doors. Magazines, books, and games may be stored in bins or baskets casually placed throughout the facility. Variations in storage options address the range of security needs required by the organization (e.g., closed cabinet, locked cabinet, locked in a room).

Realm of Activity: Walking and Exploring

Movement is essential to the conduct of normal living and a sense of independence. If a person is unable, for instance, to ambulate to a source of food when hungry, he or she becomes dependent upon someone to do so. One of the more subtle but coercive aspects of any environment is the degree to which it limits autonomous ambulation. These barriers may be physical (e.g., stairs thwarting vertical movement, destination too far away for one's strength and ability, resource unavailable) or perceptual-cognitive (e.g., unable to locate resource). In general terms, the ability to reach desired destinations is referred to as wayfinding (Passini et al. 1998).

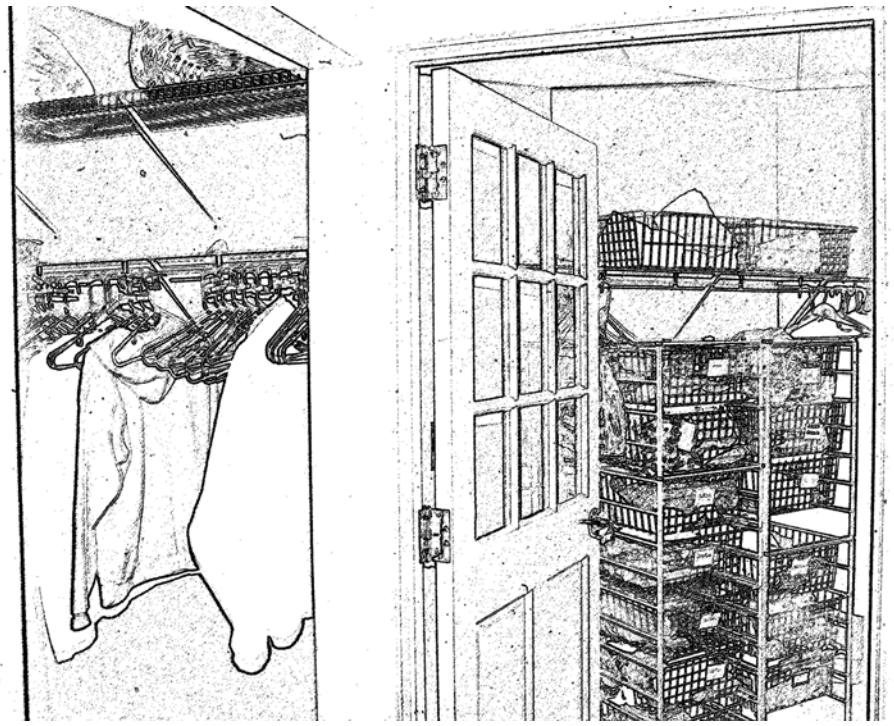

Figure 8.10. *Having storage close at hand is particularly important as families drop off their loved ones. Here, immediately off the receiving space, is a coat closet that has hangers with the participants' names as well as a storage space that has personalized bins for personal items.*

The exercise of a participant's personal control is particularly dependent on the degree to which he or she is able and free to ambulate. The goal in the design of adult day facilities is to maximize participants' personal control of situations according to their cognitive and physical abilities. Environmental control includes three particularly important dimensions. The first dimension is the ability to orient to the situation. This ability facilitates the taking of efficacious action. Second is the ability to regulate interactions with others, or the opportunity to achieve various degrees of privacy or social contact; this ability is inherently important for a healthy social life. The third dimension is related to safety. While the environment needs to support the participant's exercise of personal autonomy, it also needs to protect the participant against environmental risks (Parmalee and Lawton 1990). Safety is often a primary concern for families, staff, and organizations alike who are concerned that participants with dementia will elope. An environment that can facilitate wandering and walking in ways that offer safety and security, addresses these concerns.

Relevant experiential attributes for Walking and Exploring are:

- Personal control
- Orientation
- Safety and security
- Privacy
- Social interaction

System of Activities

Walking and exploring are part of wayfinding, which Passini (1998, 136) identifies as "composed of three interrelated processes: (1) decision-making and the development of a plan of action; (2) decision execution, which trans-

forms the plan into action and behaviors (at the right place and time); and (3) information gathering and treatment, which sustains the two decision-related processes." Thus walking and exploring may be viewed as a system of activities involving

1. Cognitive activity (decision making),
2. Physical activity (action execution), and
3. Perceptual activity (information gathering).

While it may be necessary to dismantle walking and exploring into discrete activities in order to clearly understand them, it is equally important to recognize that these activities are interrelated. This is particularly true among people experiencing dementia; far too often walking is viewed through the lens of wandering: "extended periods of aimless or disoriented movement without full awareness of one's behavior" (Namazi, Rosner, & Calkins 1989, 1). Such a perspective has led to design suggestions for wandering "dog tracks" or outdoor wandering loops; provisions simply for a purposeless act of walking. This is clearly problematic, suggesting that dementia eradicates the purposive nature of humans.

Thomas (1995) provides a more constructive and accurate description of wandering as "a purposeful behavior that attempts to fulfill a particular need (from the context of the wanderer), is initiated by a cognitively impaired and disoriented individual, and is characterized by excessive ambulation that often leads to safety and/or nuisance-related problems" (37). This definition suggests that wandering is designed to accomplish something even if it does lead to problematic consequences. Thus wandering can be re-framed as "environmental exploring." Moreover, wandering implies that a need of the participant is not being met and that the environment is somehow incongruent with this need. Modifying the environment to allow for exploration reduces the problematic aspects of wandering.

System of Settings

Since human movement is a ubiquitous part of human experience, the setting implications for the cognitive, physical, and perceptual activities of walking and exploring apply to the entire adult day service facility. Moreover, each activity is essential to successful wayfinding and thus has clear implications for setting design and design requirements (figure 8.11).

Environmental wayfinding inevitably involves successful decision making and action taking through numerous "choice points" (Kaplan 1976); as actions are taken, other possibilities that would have been opened up by alternative actions are bypassed. In the case of a simple intersection of corridors, a participant is faced with four options: going straight ahead, turning

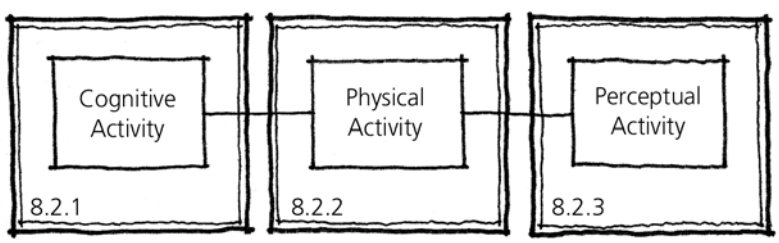

Figure 8.11. *Diagram relating the system of activities and the system of settings for Walking and Exploring*

right or left, or reversing direction. Choosing one option eliminates three alternatives. Given the difficulties in executive functioning associated with dementia, it is clear that the easier the wayfinding process, the more likely it is that the participant will achieve success.

Thus the goal for each setting is to ease the wayfinding burden associated with the setting activity. Wayfinding is conditioned by the innate physical and perceptual-cognitive abilities of the person as well as by the spatial and sensory information provided by the environment in which the person finds herself. Together, these factors comprise four areas of transaction critical to successful wayfinding; each is essential to success:

- Cognitive ability to process spatial information
- Cognitive ability to process sensory information
- Physical ability to ambulate the spatial organization
- Physical ability to perceive sensory information

Weisman (1987) identifies the four environmental variables related to each of the above transactions: architectural differentiation, signs, plan configuration, and perceptual access. Each of these environmental components should be considered in designing settings that facilitate the experiential attributes defined above.

Pattern 8.2.1. Meaningful Destinations

Problem Statement

A major aspect of personal control is the ability to define one's situation. Environmental clarity eases the burden associated with orientation, and envi-

BOX 8.2.1
Meaningful Destinations

Realm of Activity:
- Walking and Exploring; Being Outside

Key Experiential Attributes:
- Personal control
- Orientation
- Safety and security
- Privacy
- Social interaction

Activity to Be Accommodated:
- Wayfinding cognition

Anticipated Pattern Benefits:
- Provide opportunities for spontaneous, meaningful engagement
- Shift the participant's experience from wandering to exploring
- Limit accumulated agitation associated with continuously unmet need

ronmental options allow for the expression of personal choice. Providing these options while facilitating visual access between movement paths and activity areas not only enhances the participants' abilities to preview activity and engage in vicarious participation but also enhances staff members' ability to survey nearby areas.

Spatial Requirements

The core wayfinding problem with the ubiquitous double-loaded corridor and multipurpose rooms found in many institutional environments is monotony. Labyrinths, designed for the express purpose of getting people lost and confused, employ a strategy of uniformity. To avoid such monotony, adult day environments should minimize the use of corridors, and no corridor should be longer than 50 feet (Green et al. 1975). Multiple program spaces, each with its own distinctive expression, provide visual clarity (Passini et al. 1998; Weisman 1987). Different zones should clearly express purpose and should be understandable without signage (see Pattern 8.2.3). Signage is considered a supplementary source of environmental information because it cannot compensate for inherently illegible building characteristics (Green et al. 1975). Although many sources describe best wayfinding signage practices (e.g., Carpman & Grant 1993; Koncelik 1979; Pirkl 1994), we prefer to highlight the importance of more potentially meaning-laden elements that ease the burden of wayfinding, such as landmarks. Introducing memorable and distinctive landmarks at key decision points can assist participants in orientation. While objects are often used for such purposes (a grandfather clock, textile), spatial landmarks such as a piano alcove or the kitchen placed at points of intersection may prove more memorable.

Spatial configuration and perceptual access also influence wayfinding cognition. The number of decision points to move from one spatial zone to another should be minimized. It is best to keep paths of movement adjacent to, but not crossing through, activity spaces, since visual access is essential from the path to enable previewing or "environmental sampling" (Howell 1980). Enhancing visual access through the use of French doors, vision panels, and half-walls allows "explorers" to participate vicariously in activity and also assists staff in keeping an eye on all participants. Perceptual access is critical to wayfinding cognition. When people are unable to perceptually access the required information, they utilize conjecture to inform the decision-making process, relying on memory and inference, both of which are likely compromised in individuals with dementia. Similarly, as much environmental information as possible must be congruent, but one should strive to avoid environmental clutter. While simplicity and uniformity are often employed in designs for dementia, we agree with Passini and colleagues, who suggest, "Wayfinding design, we believe, is an antithesis of uniformity and boredom" (1998, 148).

Design Response

Meaningful Destinations (figure 8.12) requires clearly marked, continuous paths that facilitate movement and orientation. This pattern reflects an organizational orientation toward dementia-related wandering as an individualized expression of the desire to "go somewhere" or "do something" rather

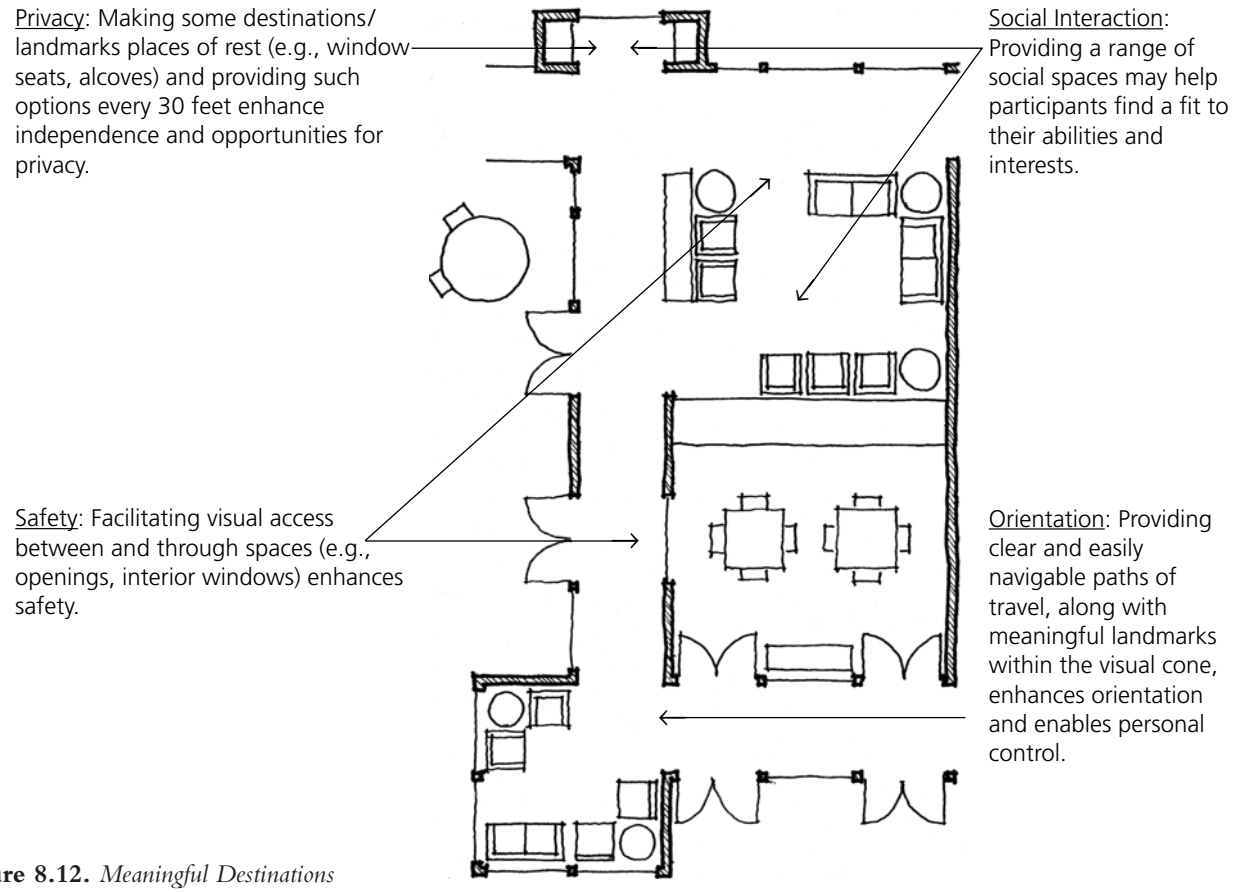
Privacy: Making some destinations/ landmarks places of rest (e.g., window seats, alcoves) and providing such options every 30 feet enhance independence and opportunities for privacy.
Social Interaction: Providing a range of social spaces may help participants find a fit to their abilities and interests.
Safety: Facilitating visual access between and through spaces (e.g., openings, interior windows) enhances safety.
Orientation: Providing clear and easily navigable paths of travel, along with meaningful landmarks within the visual cone, enhances orientation and enables personal control.

Figure 8.12. *Meaningful Destinations*

Figure 8.13. *Some of the most meaningful destinations are those with which we are most familiar and feel the most comfortable. Here a warm and welcoming setting is cued through the provision of two glider rockers adjacent to the archetypal hearth.*

than as an expression of problematic behavior. Staff should respond to wandering by providing opportunities for redirection or reconnection toward other activities. Paths should allow visual access (through openings or interior windows) to a variety of activity settings as well as to the outdoors. Instead of consisting of a long sequence of undifferentiated, repetitive elements, the path should feature unique landmarks (such as windows providing a distinctive prospect, alcoves, pianos, display cases, atriums) and places to rest, spaced no more than 30 feet apart. Doors to the outside are not locked but lead to secure spaces, easily surveyed by staff.

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BOX 8.2.2
Eliminating Environmental Barriers

Realm of Activity:
- Walking and Exploring; Being Outside

Key Experiential Attributes:
- Personal control
- Orientation
- Safety and security
- Privacy
- Social interaction

Activity to Be Accommodated:
- Physical movement

Anticipated Pattern Benefits:
- Enhanced degree of independent locomotion, reducing staff burden
- Enhanced safety should result in reduced number of falls

Pattern 8.2.2. Eliminating Environmental Barriers

Problem Statement

Physical and cognitive impairments associated with dementia often make using and moving through the environment difficult. Since the environment can be a culpable partner in such impairment, it is imperative that adult day service center design maximizes orientation and a personal sense of control while ensuring safety and security.

Spatial Requirements

The environmental variables directly related to physical ability as identified by Weisman (1987) are spatial configuration and perceptual access. The spatial configuration of an adult day center has a significant impact on the physical performance of movement, whether it be through the spatial distances required to be traveled, the width of the clear path through which one can move, or the manner in which the space is outfitted (e.g., flooring surface, door handles). Thus, travel distances should be minimized, particularly to high-use functions such as toilets. This is why the NADSA standards (2002) suggest placing toilets no more than 40 feet away from any point in a program space. Of course the challenges with travel distance can be exacerbated by the presence of obstacles such as walls, furniture, or medication carts or by a difficult-to-navigate flooring surface. For example, space requirements for dining are almost always underestimated: wheelchairs and walkers as well as carts and space for staff inevitably require more clearance than standard rules of thumb suggest.

Often objects in the environment can be designed to compensate for the decreased abilities (e.g., apraxia, visual and auditory acuity) of older persons with dementia. Perceptual access, for instance, can be enhanced through using different modes (e.g., visual, auditory, tactile) of communication for redundant presentation of essential information. An example of this is elevator signage where floors are indicated visually (with a sign), orally (by a voice saying "Third Floor"), and symbolically (in Braille); all modes convey the same information. Guidelines for eliminating environmental barriers fall within the concept of universal design, for which there are numerous excellent resources (see Further Reading below). As identified by the Center for Universal Design (1997), seven principles guide universal design decision making, all of which are relevant to ADC design:

1. *Equitable Use:* The design is useful and marketable to people with diverse abilities;
2. *Flexibility in Use:* The design accommodates a wide range of individual preferences and abilities;
3. *Simple and Intuitive Use:* Use of the design is easy to understand, regardless of the user's experience, knowledge, language skills, or current concentration level;
4. *Perceptible Information:* The design communicates necessary information effectively to the user, regardless of ambient conditions or the user's sensory abilities;
5. *Tolerance for Error:* The design minimizes hazards and the adverse consequences of accidental or unintended actions;

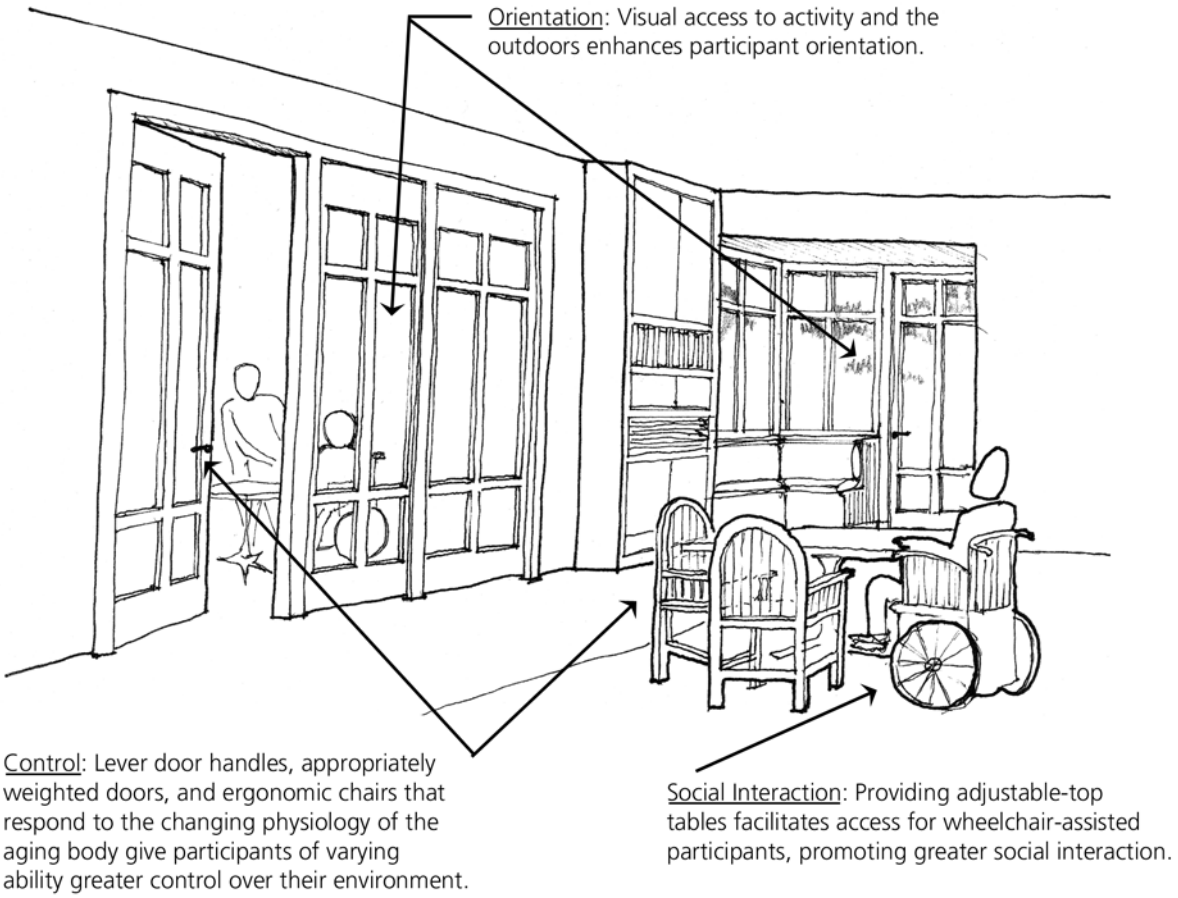
Orientation: Visual access to activity and the outdoors enhances participant orientation.
Control: Lever door handles, appropriately weighted doors, and ergonomic chairs that respond to the changing physiology of the aging body give participants of varying ability greater control over their environment.
Social Interaction: Providing adjustable-top tables facilitates access for wheelchair-assisted participants, promoting greater social interaction.

Figure 8.14. *Eliminating Environmental Barriers*

6. *Low Physical Effort:* The design can be used efficiently and comfortably and with a minimum of fatigue; and
7. *Size and Space for Approach and Use:* Appropriate size and space is provided for approach, reach, manipulation, and use, regardless of user's body size, posture, or mobility.

Design Response

Eliminating Environmental Barriers (figure 8.14) has implications for all scales of design from site planning to interior details. Initial site decisions such as location of the entryway and parking space have immediate implications for building accessibility. Paths of travel from exterior through the interior and back out into garden spaces need to be carefully orchestrated, keeping in mind the seven principles of universal design. Travel distances between decision points and places of rest should be minimized, and the attributes of travel should be easy to navigate and minimally fatiguing. The spatial configuration of the center should be designed so as to ease the burden of orientation through enhanced visual accessibility between and through spaces as well as to the outside and daylight. Environmental information should be redundantly cued through multiple modes of communication, with signage considered a supplementary, not a primary source of information. Finally, the design should support as many physical and cognitive abilities as possible through the implementation of prosthetic or self-correcting design interventions that maximize participant control and independence.

Further Reading

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Pattern 8.2.3. Privacy Gradient

Problem Statement

Dementia and aging-related challenges may produce confusion and disorientation with respect to time and place. One's orientation is rooted in a dialectic of self and social setting, both of which are potentially confusing for persons with dementia. Thus it is imperative that activity settings, their programs, and organizational policies be as clear and consistent as possible to afford each participant the greatest potential for understanding place expectations.

Spatial Requirements

People's ability to perceive the purpose of a place and the role they are expected to play within it enables them to orient themselves to the situation. This sense of orientation is the foundation on which the exercise of choice

BOX 8.2.3
Privacy Gradient

Realm of Activity:
- Walking and Exploring; Being Outside

Key Experiential Attributes:
- Personal control
- Orientation
- Safety and security
- Privacy
- Social interaction

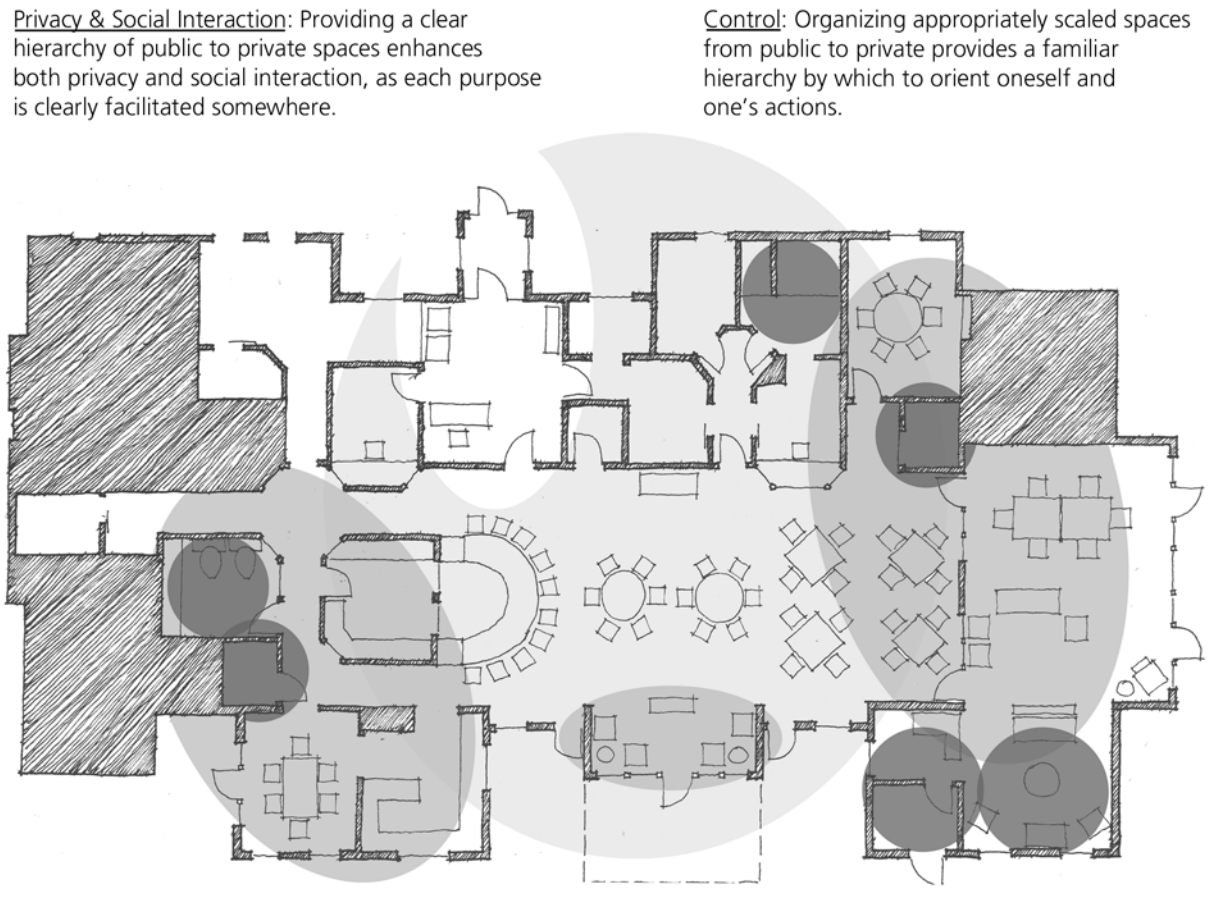
Activities to Be Accommodated:
- Perceptual information gathering and processing

Anticipated Pattern Benefits:
- Providing a range of privacy levels is likely to encourage greater social interaction
- Reduction in social withdrawal, null behavior, and agitation
- Greater exercise of independent decision making among participants

as an expression of personal control is rooted. If a participant is confused about the purpose of the place or about his or her role, inevitably the participant feels "out of control." Thus the degree of sociability or privacy of a space is essential to defining any situation. Privacy and social interaction are part of the same continuum; providing for a variety of privacy needs can facilitate more healthy and robust social interactions. Certain social activities are best done in groups and settings of particular size; for example, a card game typically has four players, while a physical exercise session may accommodate as many as ten or twelve. Other social activities, such as spiritual counseling, require more intimate settings.

Offering spaces in a range of intimacy levels requires architectural differentiation and variation in furniture, finishes, and props. Space variations (e.g., a conversation nook for two, an activity table for six) will help cue expected interactions. Without variation, environments are monotonous and cues diffuse, making it difficult to decode environments in a meaningful way. Provision of a variety of intimacy levels may prompt more spontaneous, independent activity, lightening the responsibility of staff for all activity within the day care. Creating a privacy gradient also allows staff to better redirect participants by providing more private or more public space alternatives as needed. The dementia experience is characterized by tremendous variability, and the often forgotten point is that dementia behavior is fundamentally linked to place: positive or negative assessments of activity are based on our expectations of what should happen where (Gubrium 1978). A privacy gradient offers environmental options that empower participants to better find their own places in the facility, both literally and metaphorically.

Figure 8.15. *Privacy Gradient*


Privacy & Social Interaction: Providing a clear hierarchy of public to private spaces enhances both privacy and social interaction, as each purpose is clearly facilitated somewhere.
Control: Organizing appropriately scaled spaces from public to private provides a familiar hierarchy by which to orient oneself and one's actions.

Design Response

Privacy Gradient (figure 8.15) advocates that individual spaces within a facility be laid out so that they create a sequence where entry is into the most public parts of the building, leading into somewhat more private zones, which then lead to the most private domains. Privacy Gradient should, at minimum, have at least four zones: public, semi-public, semi-private, and private. Public spaces generally trigger simple salutary conversation. While such interactions provide a great potential for successful completion by participants, they are also are the least therapeutically meaningful. Semi-public spaces accommodate groups of 8 to 16 people and generally encourage congenial interactions. Semi-private spaces accommodate 4 to 8 people and offer the possibility of interactions leading to attachment and feelings of friendship. These interactions are rich in therapeutic potential. Finally, private activities usually involve groups of up to 4 people and offer the possibility of intimate conversation. If each level of privacy is adequately realized, a breadth of social interaction types should be apparent through the facility.

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Realm of Activity: Daily Life Activities

Hellen (1998) identifies four categories of activities essential to a meaningful life: movement, thinking, psychosocial, and spiritual. Movement activities are so fundamentally different from the other three (e.g., requiring more room and energy exertion, physically rather than mentally and emotionally involved) that their environmental requirements vary as well. The environmental implications of movement are addressed under the Walking and Exploring and Physical and Related Support Activities realms of activity. This section focuses on the remaining three meaningful activity categories: thinking activities, psychosocial activities, and spiritual activities.

All three of these activities help shape the core of most activity programs in adult day settings. However, participant diversity makes effective programming quite complex since each participant has their own needs. If we focus on dementia, those who are mildly impaired are usually able to follow directions, respond to reminders and prompts, and remain fairly independent in most if not all the activities of daily living and the instrumental activities of daily living. Moderate impairment necessitates more holistic support. For instance, directions for an activity may need to be broken down into more discrete tasks and supplemented with visual cues. Severe impairment necessitates more one-on-one support and periodic reassurance. Physical touch and similar sensory therapies are often successful for this group. As age and dementia progress, physical health issues become more pressing

and therapeutic activity requires greater staff assistance (e.g., dining, exercise).

The diversity of needs and interests of people with dementia requires a varied activity program, challenging staff to choreograph the program in such a way as to bring meaning, not just activity, to daily life. However, given that the only predictable aspect of dementia care is its unpredictability, the program must allow for staff improvisation. Staff must be able to respond to each person's needs when the formal program simply cannot meet them. Making settings available for potential redirection is important for both staff and participants. These considerations are essential since thinking, psychosocial, and spiritual activities all provide important dimensions to the human experience.

Self-identity is defined in relation to objects, things, and the very places in which those objects are found (Proshansky, Fabian, & Kaminoff 1995). Places and the props within them serve as salient mnemonics for the expectations of activity that is to occur there. Stimulation in adult day environments involves not only the need to limit the arousal of stress but also environmental characteristics that provide critical environmental information. Stress from stimulation is not so much an issue of quantity as it is an issue of coherence. As Evans and Cohen (1987, 573) suggest, "for stress to occur the individual must evaluate [the] . . . imbalance between environmental opportunities and individuals' goals, and capabilities to cope with that imbalance." If the purpose of the place, as reflected through environmental opportunities, is unclear to begin with, the required coping mechanisms become ambiguous, and the demand of the situation increases, resulting in stress. Thus an important design question is, "Is the mnemonic of the place clear?" If it is, the place is likely to engender appropriate activity; participants are more likely to be able to understand their role in the setting and the activity; and the dialogue among the self, others, and the environment is likely to have more positive interactions, thereby enhancing self-identity. If the expectations of a situation are clear, then functional abilities are likely maximized. Clarity of mnemonics is based on how recognizable they are, and therefore familiarity is a critical component in developing appropriate social stimulation.

Relevant experiential attributes for Daily Life Activities include:

- Quality sensory stimulation
- Supporting functional independence
- Meaningful activities
- Continuity of the self
- Social interaction

System of Activities

All three categories of Daily Life Activities—thinking, psychosocial, and spiritual—occur in various settings, ranging from individual to large group. Individual thinking includes such activities as doing puzzles and reading a newspaper. Group thinking activities include bingo or word games. Psychosocial activities range from engaging in an individual activity that reinforces self-identity (e.g., folding towels reinforcing homemaker role), to group singalongs. Similarly, spiritual activities range from individual prayer to group devotions.

The dynamics of various group sizes differ. Monads (one person) and dyads (two persons) occur only when participants choose to engage in a given activity; but with groups of three or more, the group begins to take on a life of its own, placing demands on the various participants (Simmel 1964). Concomitantly, any activity requires enactment of only so many roles, and therefore activities may be either under- or overpopulated (Barker 1968). Underpopulated activities will encourage greater active participation because everyone will have to enact a role if not multiple roles in order for the activity to continue. In overpopulated activities the opposite happens: having more people than roles essentially excludes some of the group members from meaningful engagement with the activity. Together, these points illustrate how important it is to provide opportunities for small group interactions and achieve fit between group size and the number of roles required by any activity.

Hall (1966) suggests that humans participate in four prototypical types of social interactions: public, socio-consultative, personal, and intimate interactions. Each type of interaction is a necessary aspect of healthy human interaction, yet the work of Unruh (1983) suggests that the aforementioned list ranges from the least therapeutically beneficial (public interactions) to the most therapeutically beneficial (intimate). This implies that adult day settings need to work extraordinarily hard to facilitate more personal and intimate interactions while providing opportunities for more typical public interactions. The work of Hall (1966) makes clear that each type of social interaction has a specific socio-spatial relationship within which it is most likely to occur. Intimate interactions—those human interactions which are the most therapeutically beneficial (Unruh 1983)—would occur in monads and dyads; personal interactions would most likely occur in groups of 3–4 people; socio-consultative activities occur in groups of 5–12 people; and public interactions most likely occur in groups of more than 12 people.

System of Settings

The system of activities outlined above suggests the need to provide settings that facilitate intimate, conversational, small group, and large group activities. Intimate activities are likely to reinforce sense of self through the enactment of a meaningful social role. Conversational activities (dyads and perhaps triads) promote affiliation and thereby a sense of social identity. Small group activities (no more than 6–8 people) are aimed at collective action and development of group adhesion. These small group activities are the most diverse in terms of stimulation: some may be very quiet and subdued, while others may be very active. Finally, large group activities are those rare activities that take place when an enlarged sense of community is desired. These are typically activities of high sensory stimulation.

As seen in figure 8.16, Pattern 8.3.1 (Places for Life's Work) facilitates intimate activities. Pattern 8.3.2 (Conversation Corners) facilitates conversational activities of 2 to 4 people. Pattern 8.3.3 (Clustering Small Activity Settings) addresses how to facilitate small group activities in settings that are flexible enough to allow for the occasional large group activity. Finally, Pattern 8.3.4 (Distinct yet Connected Program Areas) accommodates alternative systems of settings that would provide different stimulation qualities and quantities. The approach to shaping each of these settings begins with stat-

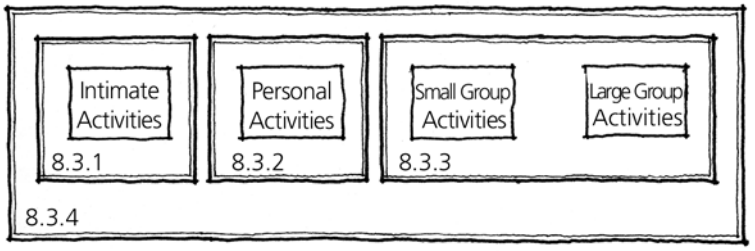

Figure 8.16. *Diagram relating the system of activities and the system of settings for Daily Life Activities.*

ing the problem in terms of the therapeutic intentions of the overall realm of Daily Life Activities listed above.

Pattern 8.3.1. Places for Life's Work

Problem Statement

Persons with dementia are not homogeneous—they represent a diversity of past experiences. All persons with dementia have acquired and enacted social roles with which their self-identity is associated, yet dementia often thwarts the enactment of these social roles. A sense of being needed and of playing a vital role is essential for life to be meaningful. Adult day settings must provide the settings, props, and care support that allow participants to successfully reenact their social roles.

Spatial Requirements

Activities that entail responsibility—to ourselves, other people, and other living entities—are central to human experience. Too often people with dementia are characterized as no longer able to handle responsibilities and are cast in the role of "dependent," emphasizing their inabilities. Studies of nursing home residents, however, suggest that given the opportunity to be re-

BOX 8.3.1
Places for Life's Work

Realm of Activity:
- Daily Life Activities

Key Experiential Attributes:
- Quality sensory stimulation
- Supporting functional independence
- Meaningful activities
- Continuity of the self
- Social interaction

Activities to Be Accommodated:
- Intimate activities

Anticipated Pattern Benefits:
- Enactment of familiar social roles by participants
- Increased engagement and associated social interaction decreases anxiety

sponsible for something (e.g., watering plants, feeding fish in an aquarium, folding linens), people experience statistically significant improvement in alertness, active participation, and sense of general well-being (Langer & Rodin 1976). People with dementia need opportunities to exercise their remaining capabilities; otherwise, these capabilities may atrophy more rapidly (Lawton 1986).

Work is a powerful source of meaning and basis of self-esteem—pride can emanate from a job well done or providing for family. A perceived social role is rich with meaning, whether the role is office manager, mother, gardener, or host(ess). If the props and the setting do not afford cueing for enactment of these roles, self-definition is compromised. This is why all staff must be familiar with the life histories and individualized care plans for every participant. Once staff identify the social roles to which a person may be most closely attached, they must also provide activities that allow participants to enact these roles; such enactment becomes paramount for successful therapeutic activity. Hellen (1998) provides a useful list of "normalization" activities, some of which include folding laundry, washing clothes or dishes, tinkering with hardware, shining shoes, stuffing envelopes, reading the stock market pages, and caring for pets or plants. These activities require different props (e.g., laundry, shoes, envelopes, newspapers, plants) and different settings. For instance, folding clothes is perhaps best done at a table, whereas caring for plants usually occurs in different places throughout the home; washing dishes is usually done at a kitchen sink. Computer access will provide an important activity within adult day centers of the future: computer equipment is typically found in a (home) office setting. Thus programmed activities can and should be informed by the social roles of participants, roles that provide the foundation for a physical setting rich in potential for cueing important aspects of daily life.

Design Response

Places for Life's Work (figure 8.17) suggests that adult day services offer settings and props that allow participants to engage in meaningful, familiar ac-

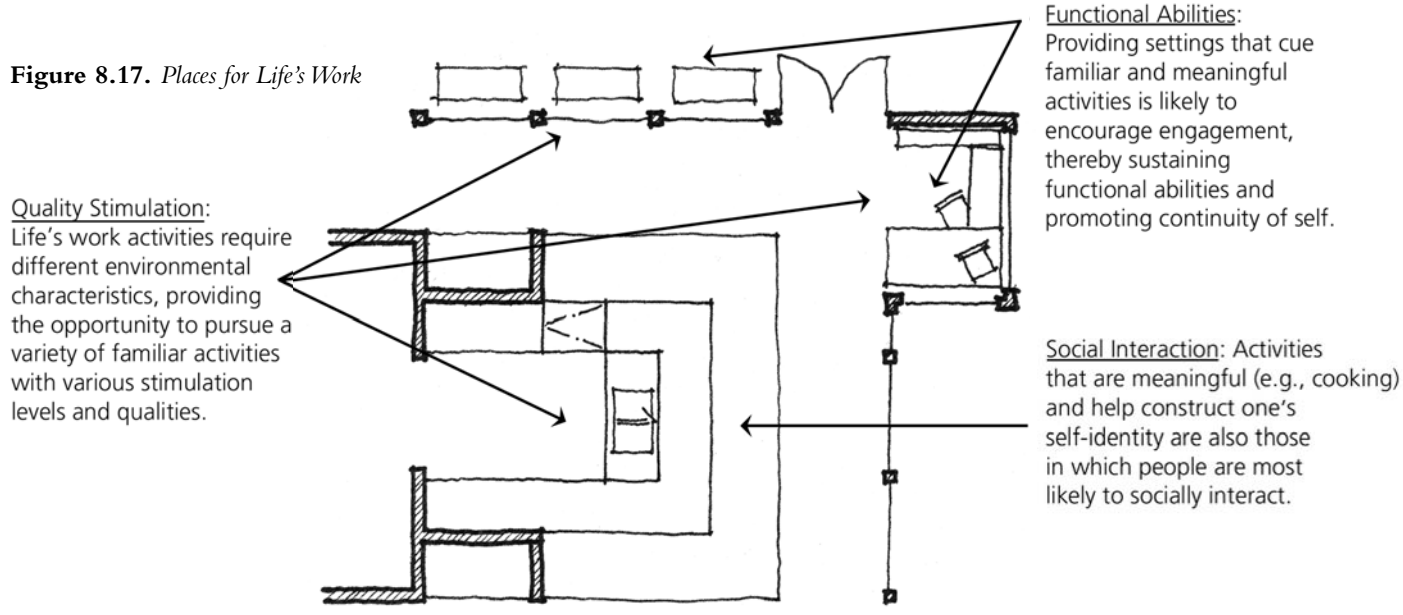
Functional Abilities: Providing settings that cue familiar and meaningful activities is likely to encourage engagement, thereby sustaining functional abilities and promoting continuity of self.
Quality Stimulation: Life's work activities require different environmental characteristics, providing the opportunity to pursue a variety of familiar activities with various stimulation levels and qualities.
Social Interaction: Activities that are meaningful (e.g., cooking) and help construct one's self-identity are also those in which people are most likely to socially interact.

Figure 8.17. *Places for Life's Work*

tivity. Such settings and props must mutually reinforce cueing of the activity. In order to determine a range of relevant life work activities, life histories should be requisitioned from participants and their families as a part of the admission process, and efforts to programmatically incorporate these activities should be pursued to the greatest extent possible. To enhance the likelihood of successful experiences, settings should be visible from adjacent activity areas, affording staff natural opportunities to provide assistance as necessary.

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Pattern 8.3.2. Conversation Corners

Problem Statement

People are inherently social animals, and social interaction is an essential aspect of a healthy life, particularly social engagements in which we independently choose to participate. One of the primary purposes of adult day services is to stimulate healthy social interaction and the formation of friendships. Since research indicates that smaller social groups are more likely to

BOX 8.3.2
Conversation Corners

Realm of Activity:
- Daily Life Activities

Key Experiential Attributes:
- Quality sensory stimulation
- Supporting functional independence
- Meaningful activities
- Continuity of the self
- Social interaction

Activity to Be Accommodated:
- Conversational activities

Anticipated Pattern Benefits:
- Encouragement of spontaneous, meaningful conversation likely to reduce agitation and enhance positive emotional outcomes
- Social interaction likely to enhance maintenance of cognitive abilities and result in fewer negative behaviors
- Redirection and one-on-one interactions by staff likely to be enhanced

have therapeutic benefit than larger groups, adult day settings should do all they can to facilitate small group interactions.

Spatial Requirements

As noted previously, conversational activities are likely to occur in groups of two to four people, and therefore the physical design should provide opportunities for such gatherings. Regnier (2002) refers to the need for "Dyads for Intimacy," which he describes as corner alcoves having two chairs with a table between them. Regnier notes that "Moos and his colleagues (1987) found this to be the most heavily used furniture configuration in their early analyses of service-based housing" (2002, 82). For maximum flexibility, we suggest also providing opportunities for conversation groups of up to four persons.

Whether there are two, three, or four places to sit in these furniture groupings, in each case it is important for cueing purposes that they share some environmental characteristics. Effective settings provide vicarious and unobtrusive observation opportunities. These views could be toward an adjacent activity (facilitating "people watching") or toward the outside to an interesting framed view of nature. These areas should also be proximate to major circulation pathways for ease of access and encouragement of spontaneous conversation. Comfortable, ergonomically sound furniture arranged in a sociopetal configuration (e.g., furniture oriented toward a shared focus, arranged in L's, or U's) promotes conversation, as do props such as newspapers or snacks.

Design Response

Conversation Corners (figure 8.18) offer sociopetal seating for groups of two, three, or four that are proximate to, but distinct from, circulation path-

Figure 8.18. *Conversation Corners*

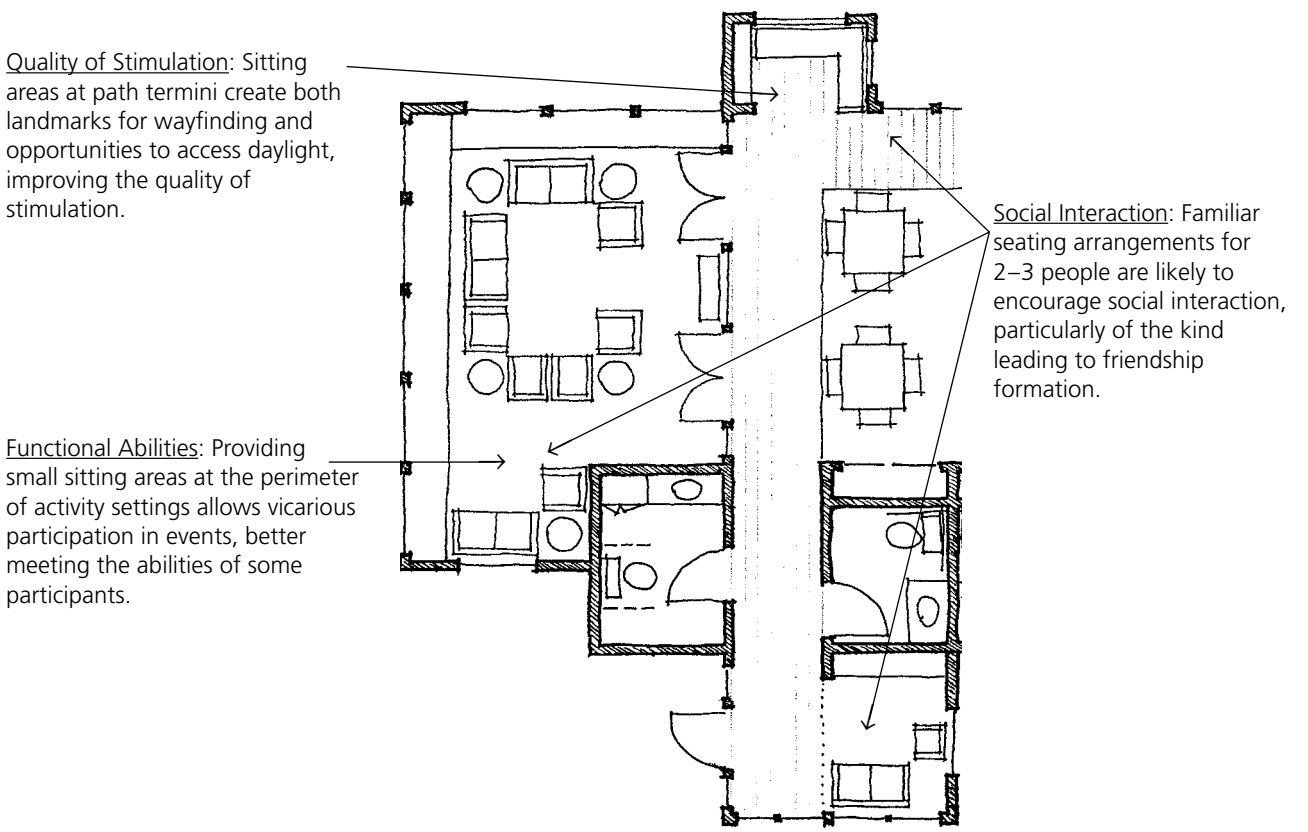
Quality of Stimulation: Sitting areas at path termini create both landmarks for wayfinding and opportunities to access daylight, improving the quality of stimulation.
Social Interaction: Familiar seating arrangements for 2–3 people are likely to encourage social interaction, particularly of the kind leading to friendship formation.
Functional Abilities: Providing small sitting areas at the perimeter of activity settings allows vicarious participation in events, better meeting the abilities of some participants.

Figure 8.19. *Social interaction is most likely to occur in groups of two or three. Providing conversation corners, particularly within view of some activity, promotes meaningful social engagement among participants and staff alike.*

ways; they provide unobtrusive visual access toward activity, which can stimulate vicarious participation.

Further Reading

Cohen, U., & Weisman, G. D. (1991). *Holding on to home: Designing environments for people with dementia.* Baltimore: Johns Hopkins University Press.

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Pattern 8.3.3. Clustering Small Activity Settings

Problem Statement

Activities are the most important aspect of day care for the cognitively impaired. When activity settings, the program, and related organizational policies are clear and consistent, they afford participants the greatest potential for understanding and responding to the socially defined behaviors appropriate to the settings.

Spatial Requirements

This pattern facilitates small group activities in a setting flexible enough to allow for occasional large group activities. However, small group activities range significantly in terms of quality of sensory stimulation—from the very loud (dancing) to the very quiet (meditation); from high olfactory stimulation (baking, aromatherapy) to those requiring lots of light (crafts) and those where more subdued lighting may be appropriate (devotions). This diversity alone provides evidence that multipurpose rooms are simply incapable of serving the heterogeneous adult day setting programs. The diversity of activities and stimuli alluded to above provide a rationale for creating clusters of settings that share certain qualities of stimulation (i.e., group quiet settings

BOX 8.3.3
Clustering Small Activity Settings

Realm of Activity:
- Daily Life Activities

Key Experiential Attributes:
- Quality sensory stimulation
- Supporting functional independence
- Meaningful activities
- Continuity of the self
- Social interaction

Activity to Be Accommodated:
- Small group activities, large group activities

Anticipated Pattern Benefits:
- Increased social interaction and positive affect
- Reduction in confusion, agitation, and social withdrawal
- The distinctive meanings of activities are enhanced and reinforced by settings that cue the activity-related behaviors

adjacent to one another). This helps to create clarity in the various spatial zones within the building advocated in Pattern 8.2.3 (Privacy Gradient), which enhances perceptual understanding of the place.

However, there are times when adult day programs want participants to engage in public interactions (e.g., the holiday sing-along). Because these activities offer only marginal therapeutic benefits, they should occur only sporadically; nonetheless, provision needs to be made for them. If settings of shared quality have been clustered, the boundaries between such settings can disappear: multiple spaces can be merged into one. Movable bookcases or space dividers serve this purpose. The key point is that too often the driving design consideration in this approach is the "worst-case scenario"—the holiday sing-along that happens once a year for which families and friends show up. The facility then ends up with a large group space that is optimal for only two hours out of the year; during the remainder of the time, the physical setting undermines the more common small-group activities. We suggest turning that thinking around and focusing on the programmed activities that occur on most days. The holiday sing-along will still be worthwhile even if it becomes a tight squeeze.

Design Response

Clustering Small Activity Settings (figure 8.20) suggests clearly defined, adjacent settings. Each setting should cue distinct daily life activities in a manner that participants can easily recognize. Settings may be domestic (a kitchen, a music area) as well as occupational (an office, a workbench). Naming each setting reinforces recognition (e.g., "The Den" or "The Cafe") as do furnishings consistent with the activity. Participants should be free to

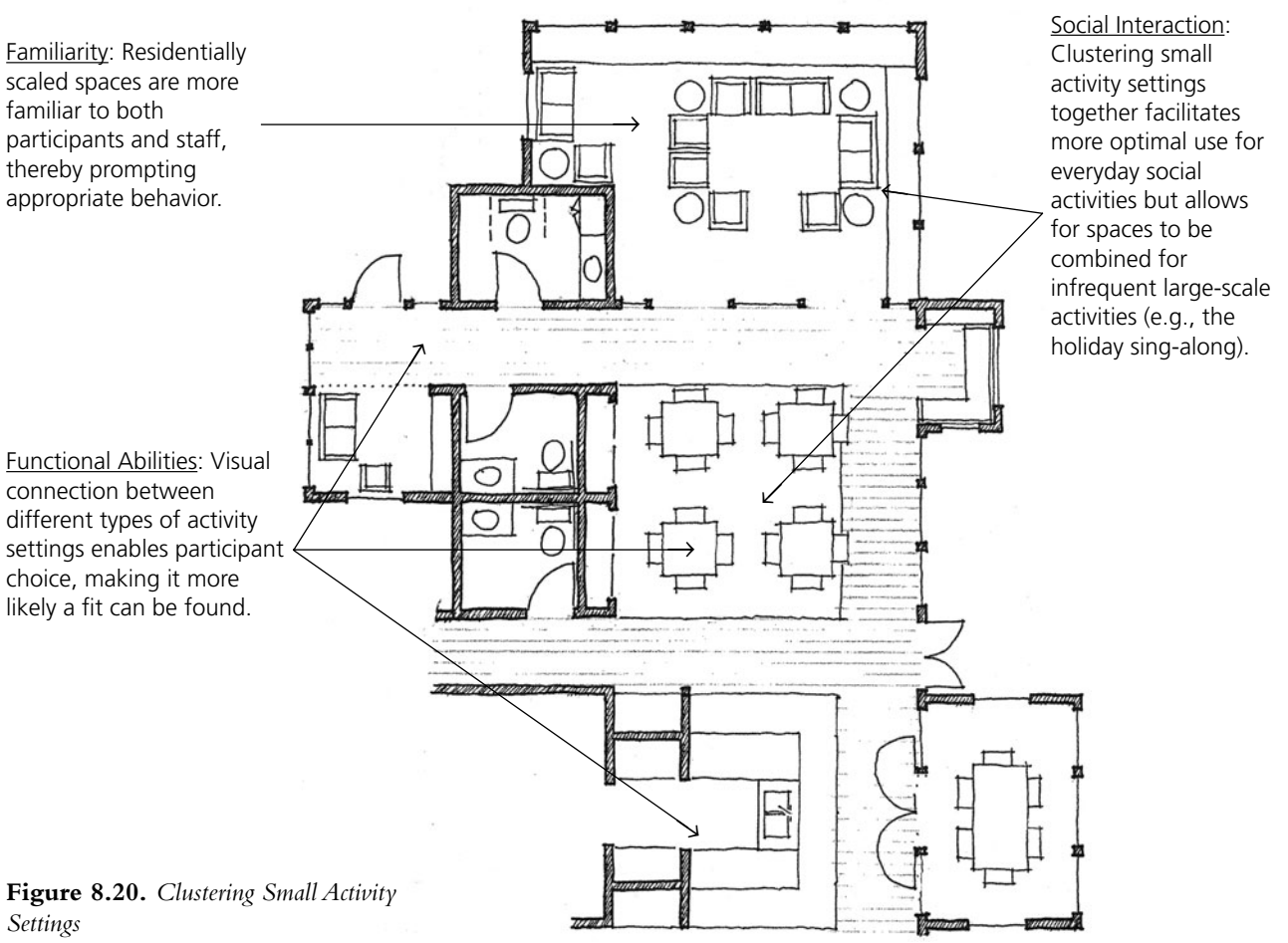
Familiarity: Residentially scaled spaces are more familiar to both participants and staff, thereby prompting appropriate behavior.
Social Interaction: Clustering small activity settings together facilitates more optimal use for everyday social activities but allows for spaces to be combined for infrequent large-scale activities (e.g., the holiday sing-along).
Functional Abilities: Visual connection between different types of activity settings enables participant choice, making it more likely a fit can be found.

Figure 8.20. *Clustering Small Activity Settings*

choose among the different settings throughout the day. Settings should range from the more intimate (designed to seat 2–4 people), to mid-size, accommodating no more than 16 seated people. Furniture for each setting should be arranged in a familiar, conversational fashion, conducive to the given activity. The style of furnishings should be familiar and consistent with the desired "personality" of the place (i.e., residential for a homey ADC, comfortable yet refined for a country club–type ADC). There should be a minimum of geri-chairs or recliners throughout the activity settings. Special events and large group activities (more than 12 people) should occur only sporadically and can be accommodated by reconfiguring the furniture from two or more connected spaces. Chairs and other furnishings should not be lined up along the periphery of a space or setting on a regular basis. Toilet rooms should be adjacent to and visible from the activity settings (see Pattern 9.1.1 in the following chapter).

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Cohen, U., & Weisman, G. D. (1991). *Holding on to home: Designing environments for people with dementia.* Baltimore: Johns Hopkins University Press.

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BOX 8.3.4
Distinct yet Connected Program Areas

Realm of Activity:
- Daily Life Activities

Key Experiential Attributes:
- Quality sensory stimulation
- Supporting functional independence
- Meaningful activities
- Continuity of the self
- Social interaction

Activity to Be Accommodated:
- Intimate, personal, socio-consultative, and public activities

Anticipated Pattern Benefits:
- Maximizing the abilities of participants with a wide range of needs
- Supplying both staff and participants with a variety of settings that provide different types and levels of stimulation
- Environmental variety enhances the abilities of staff and participants to autonomously find their "places" in the facility

Pattern 8.3.4. Distinct yet Connected Program Areas

Problem Statement

The needs, interests, and desires of cognitively impaired individuals evolve as their dementia progresses. Often adult day care settings will find themselves serving such a broad range of needs that the demands of one group of participants conflicts with those of another. Rather than compromise the therapeutic potential for any group, it is desirable to provide distinct areas and activities geared toward the varying needs and abilities of participants. Such an approach enhances participants' sense of personal control by allowing them to choose the activity and place in which they find the greatest sense of belonging.

Spatial Requirements

While Pattern 8.3.3, Clustering Small Activity Spaces, is focused on the need for adult day service centers to provide a range of settings to facilitate activities of various qualities, thereby focusing on environmental stimuli, this pattern focuses on the other side of the stress equation—the participants' coping capabilities. As anyone who has experienced adult day services knows, the coping abilities of participants range significantly. These coping abilities change over time, not only as chronic conditions progress but, as with dementia, even diurnally—hence, the concept of "good days" and "bad days." Because of this, we suggest that programs clearly identify the retained coping abilities of participants and cluster participants of similar abilities to-

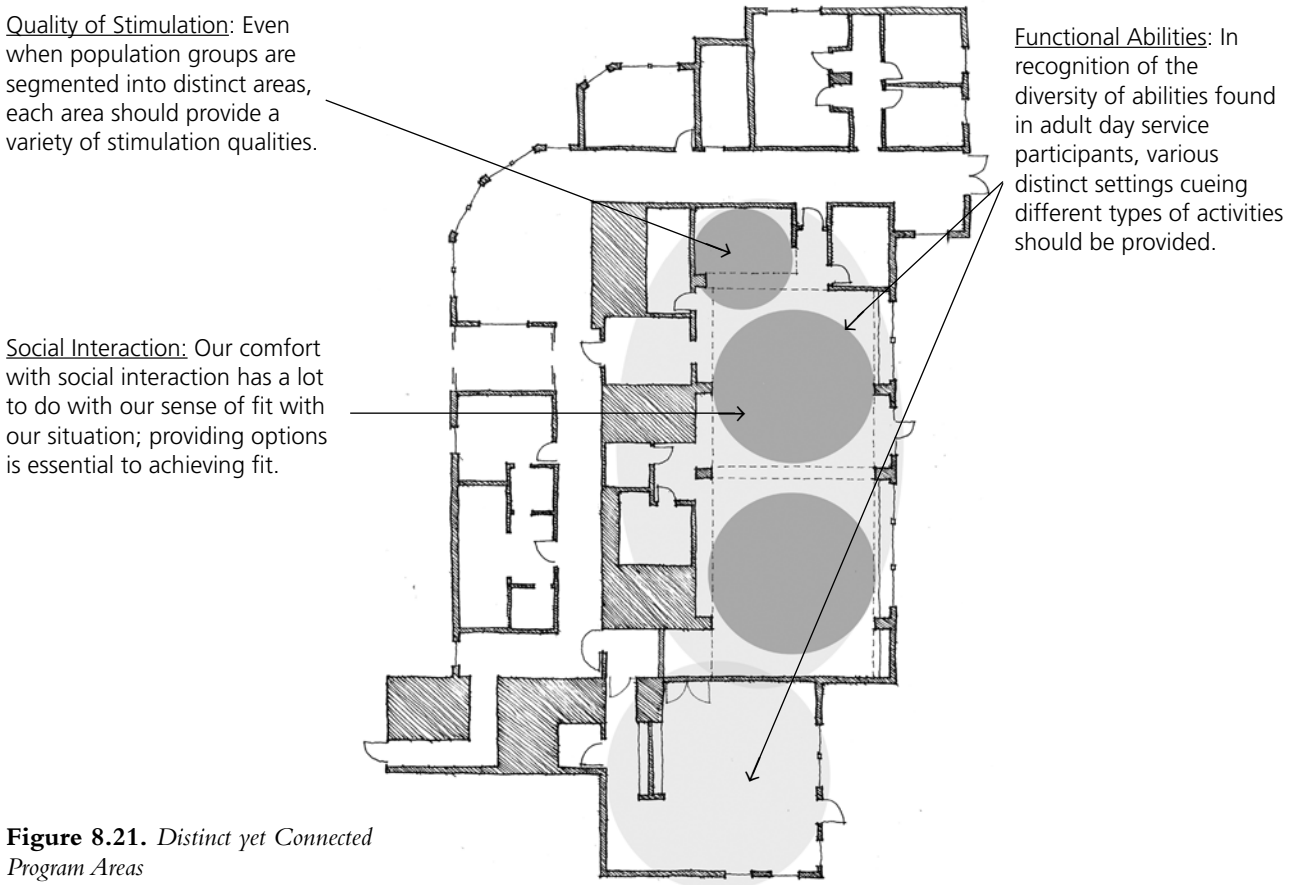
Quality of Stimulation: Even when population groups are segmented into distinct areas, each area should provide a variety of stimulation qualities.
Social Interaction: Our comfort with social interaction has a lot to do with our sense of fit with our situation; providing options is essential to achieving fit.
Functional Abilities: In recognition of the diversity of abilities found in adult day service participants, various distinct settings cueing different types of activities should be provided.

Figure 8.21. *Distinct yet Connected Program Areas*

gether. The spatial implication of this strategy is to provide multiple programs within different program areas, each targeted to particular participant needs.

Design Response

Distinct yet Connected Program Areas (figure 8.21) suggests creating distinct spaces designed to support the independence of participants whose needs and abilities vary. At the same time, these spaces are interconnected in such a way as to facilitate participants' sense of personal control and choice. The degree of separation/integration among settings/groups/activities may vary from organization to organization. In dementia-capable day centers serving more than one stage of dementia (the majority of adult day facilities), there should be at least two but no more than three Distinct yet Connected Program Areas, and no program area should serve less than eight participants. Each Distinct yet Connected Program Area should include several smaller activity settings in which a variety of concurrent activities (formal as well as informal) are available throughout the day. Connection of program areas also implies connection to the outdoors. Views to the outside should be possible from every major program space. Program spaces should be bright, with plenty of natural light; glare should be effectively controlled. Windows should be operable to allow fresh breezes and the scents of nature inside. Nature should be brought indoors in the form of plants, flowers, tabletop fountains, and artwork. Physical access to secure outdoor space is imperative.

Figure 8.22. *In Distinct yet Connected Program Areas, staff and participants may focus on the activity at hand in their space while retaining visual and physical access to other opportunities in other spaces. Here a series of French doors provides for separation yet allows for connection.*

Realm of Activity: Cooking and Dining

Preparing and eating food constitutes one of life's essential activities. Tasks are completed ritualistically and routinely, infused with meaning and significance. "Home keeping"—washing dishes, sweeping, cooking and baking—are central to the identity of many individuals, especially if their primary social role was homemaker. Within adult day service settings, such activities afford these participants a sense of continuity and a high degree of likely success. This is why kitchens as a place to provide occupational therapy enjoy such a high degree of currency in the gerontology literature (e.g., Berenbaum 1994; Bowlby 1993).

From a caregiving perspective, weight integrity is a critically important barometer of health for those with dementia; weight is influenced by dysphagia, apraxia, change in activity, and most certainly by change in diet. Participants' dietary restrictions can vary significantly, and eating abilities range widely; some people are completely independent, while others need intensive assistance. Participants may not even be able to communicate the underlying reasons why they do not want to eat; thus, staff need training that enhances responsiveness to behavioral cues, and the ability to decipher them and to provide assistance in an appropriate and timely fashion. Because dining is a staff-intensive activity, particularly if the level of need for assistance among participants is high, teamwork is essential, and environmental support may ease the caregiving burden.

Providing a kitchen that looks and operates like a kitchen helps cue the activities likely to occur there. Once a participant is oriented to "kitchen," the activity can be structured to optimize and maintain the participant's

functional abilities. Often these activities allow participants to become quite social again, due to the familiar and consistent cueing between environment and activity. Providing tables of four or six that afford manageable social interaction and recognizable props such as tablecloths or placemats, plates, and silverware that is familiar and easily manipulated enhances orientation to the dining activity. When done right, dining can become an important social interaction, even if a participant is passively enjoying the company of others.

Relevant experiential attributes for Cooking and Dining are:

- Supporting functional independence
- Quality sensory stimulation
- Continuity of the self
- Meaningful activities
- Social interaction

System of Activities

The activities of cooking and dining are quite involved and complex, although through habituation, we engage in them without thinking. Baking cookies, for example, involves acquisition of the ingredients and equipment; following the recipe instructional sequence accurately; engaging in all the various activities (e.g., measuring, mixing, rolling) to a degree of success; and cleaning up. Cooking involves gathering and storing, preparing, and cleaning up.

Dining, similarly, involves many subtasks largely defined by socio-normative criteria, including preparation (e.g., placing food on plates), serving (e.g., family style versus restaurant style), eating (typically with utensils), and clean-up. Due to its significant relationship with social norms, the interpersonal component of the dining activity is particularly important to consider. Every participant has a certain ability for engaging in this activity that should be recognized. The dining experience for one is likely to be quite different from that for another, and these differences are important to consider as one addresses the dining activity. Similarly, dining often serves as a highly effective prompt for social interaction, and efforts should be made to seize upon this therapeutic resource. In fact, it is important to consider the hierarchy between dining and social interaction in that there are certain times when dining is the primary rationale (e.g., lunch) and other times when food is simply utilized as an effective prompt for socialization (e.g., meeting for coffee). Both of these social-dining experiences should be provided for in an adult day setting.

System of Settings

One could argue that there are six essential activities to the cooking and dining realm of activity: (1) storing, (2) preparation, (3) transforming, (4) serving, (5) cleaning up, and (6) eating, which has two variations: eating in a group (emphasis on dining), and social eating (emphasis on social interaction).

As seen in figure 8.23, Pattern 8.4.1 (Kitchen for Everyone) facilitates the core activities typically associated with the residential kitchen: storage, preparation, transformation, service, and clean-up. As diagrammed, it becomes clear that the activities of serving and clean-up are critical to designing effectively for the realm of cooking and dining. Pattern 8.4.2 (Socially

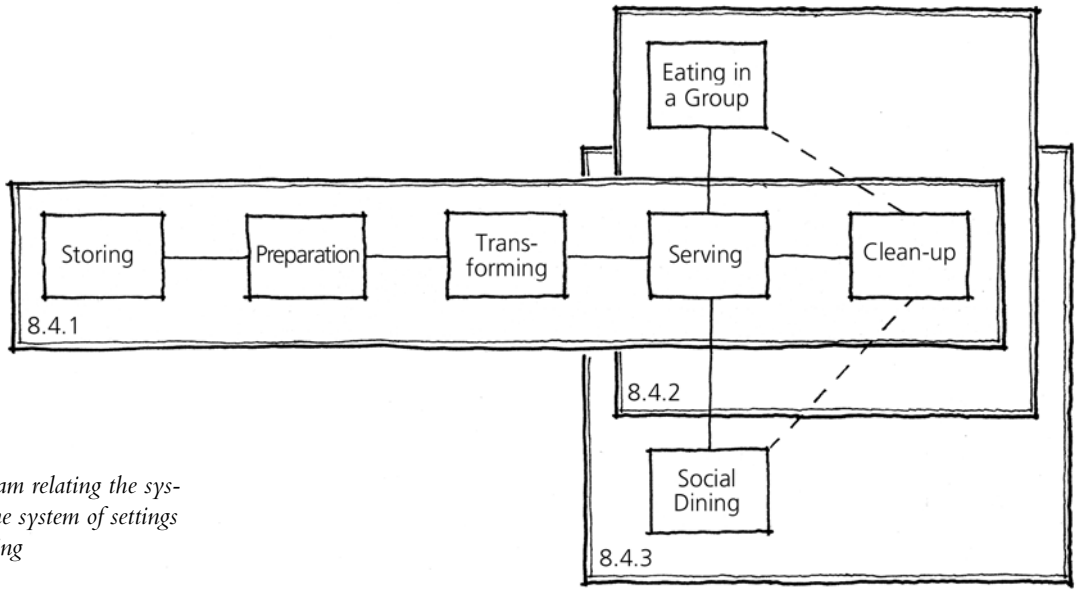

Figure 8.23. *Diagram relating the system of activities and the system of settings for Cooking and Dining*

Supportive Dining) facilitates group dining, while Pattern 8.4.3 is asked to cue social dining experiences. The approach to shaping each of these settings begins with stating the problem in terms of the therapeutic intentions of the overall realm of Cooking and Dining listed above.

Pattern 8.4.1. Kitchen for Everyone

Problem Statement

Cooking is a daily activity essential to independent living. It encompasses a set of habitual tasks that have powerful meanings related to independence, competence, creativity, nurturing, and familiar social roles. Such activities offer rich stimuli for all five senses, even for those people not directly engaged in the activity (e.g., the aroma of baking bread). At the same time, cooking is commonly associated with potentially unsafe items or situations: sharp items, heavy utensils, very hot or cold items. In addition, the activities of kitchen-based work can be complex. Since kitchen-based activities possess so many familiar and healthy associations, making it an effective prompt for therapeutic occupational tasks as well as for socialization, ADCs should actively support cooking activity, despite the potential for unsafe situations.

Spatial Requirements

This pattern should facilitate five distinct activities: storing, preparing, transforming, serving, and clean-up. Storing is an important component of all sorts of activities, but particularly in regard to cooking. Items to be stored include food (refrigerated and not) and supplies. These items may be readily available (unlocked, visually accessible) or secured (locked cabinet), depending on the security needs of the situation. Preparation and serving often require similar environmental characteristics. These characteristics include a comfortable and adequate-sized work surface and easy access to supplies, food, and equipment. Transformation may take several forms in terms of cooking. Food may be chilled (refrigerated or frozen), baked (oven), boiled (cook top), or microwaved. These all have implications on the requisite equip-

BOX 8.4.1
Kitchen for Everyone

Realm of Activity:
- Cooking and Dining

Key Experiential Attributes:
- Supporting functional independence
- Quality sensory stimulation
- Continuity of the self
- Meaningful activities
- Social interaction

Activity to Be Accommodated:
- Cooking activities

Anticipated Pattern Benefits:
- Independence promotes control over environment (for participants and staff)
- Assists in building participant self-esteem
- Provides a safe cooking environment
- Makes supervision less of an issue

ment that a kitchen should possess. Finally, clean-up highlights the need for access to water and cleaning supplies as well as to waste disposal.

Design Response

A Kitchen for Everyone (figure 8.24) implies that kitchen-based activities such as cooking and baking, and even kitchen table chats, are components

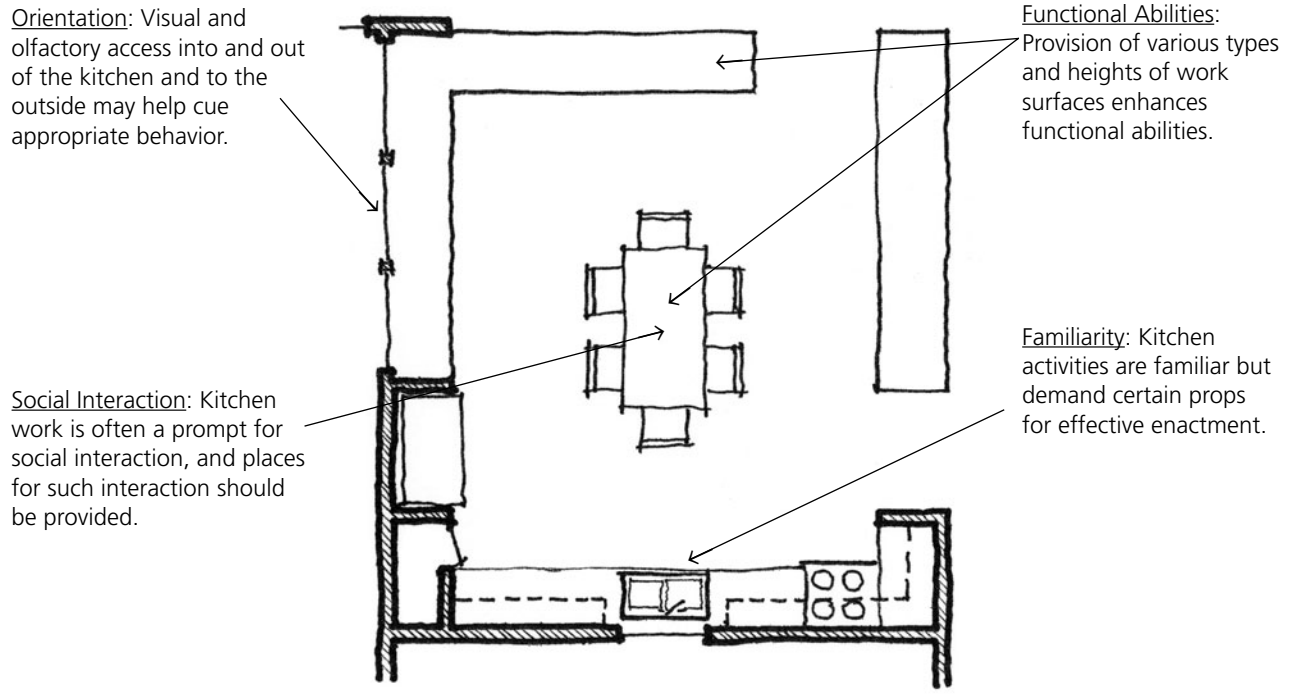
Orientation: Visual and olfactory access into and out of the kitchen and to the outside may help cue appropriate behavior.
Functional Abilities: Provision of various types and heights of work surfaces enhances functional abilities.
Familiarity: Kitchen activities are familiar but demand certain props for effective enactment.
Social Interaction: Kitchen work is often a prompt for social interaction, and places for such interaction should be provided.

Figure 8.24. *Kitchen for Everyone*

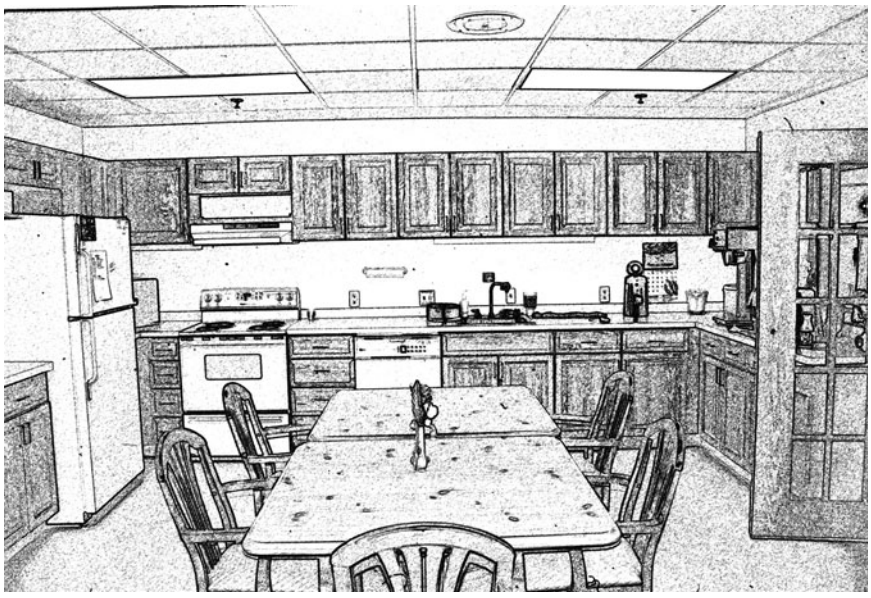

Figure 8.25. *In this Kitchen for Everyone, work surfaces at counter height as well as table height are provided, with all equipment and supplies in close proximity. A group of 4–6 can be engaged in meaningful activity in a kitchen such as this.*

of the therapeutic program in the adult day care setting. The kitchen (including appliances and supplies) is always available for participant use; participants and staff are free to get their own water, coffee, and perhaps snacks, throughout the day. The issue of accessibility should be addressed by designing the kitchen in accord with principles of Universal Design (cf. Covington & Hannah 1997) so that it meets the needs of as many users as possible regardless of ability. To maximize participation at all levels (active as well as passive observation), the kitchen should be visible from adjacent activity areas. The kitchen should have a residential feel to it. Safety precautions for kitchen equipment and supplies should be neither excessive nor obtrusive.

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Pattern 8.4.2. Socially Supportive Dining

Problem Statement

Dining is a crucial element of any adult day service program. It is a multifaceted activity with psychosocial, cognitive, and physical dimensions. Dining is also the most staff-intensive period of the day. This highly complex

BOX 8.4.2
Socially Supportive Dining

Realm of Activity:
- Cooking and Dining

Key Experiential Attributes:
- Supporting functional independence
- Quality sensory stimulation
- Continuity of the self
- Meaningful activities
- Social interaction

Activity to Be Accommodated:
- Dining in groups

Anticipated Pattern Benefits:
- Maximized participant independence in dining, yet readiness to meet the inevitable changes in abilities over time
- Enhanced efficiency of staff in providing assistance to participants
- Improved participant interest in dining with potential increase in dietary intake
- Reduction in social stigma often associated with assistance in eating

and critically important experience is too often standardized in adult day settings and conducted in one large area. Such an approach hinders the ability of the organization to target and provide appropriate levels of care to individual participants.

Spatial Requirements

Each participant may have somewhat different environmental needs in regard to dining that should be considered in the design of a dining area. Lawton (1986, 125) for instance notes that "dining-room space . . . is almost always underestimated; wheelchairs, walkers, and wide gaits inevitably require more clearance than standard rules of thumb provide." Such considerations also involve the provision of physical elements, such that adjustable tables and ergonomically appropriate chairs should be employed. Participants' physical abilities inform design considerations as do their functional abilities. For instance, people who need assistance with feeding require space not only for themselves but for staff as well.

The group dimension of dining also informs the spatial requirements of dining. How many people will be eating together at one time? Since people occupy space, this number is critical to defining the space requirements. This needs to be considered not only in light of the issues just mentioned but also in regard to the type of interactions that are hoped for in the place.

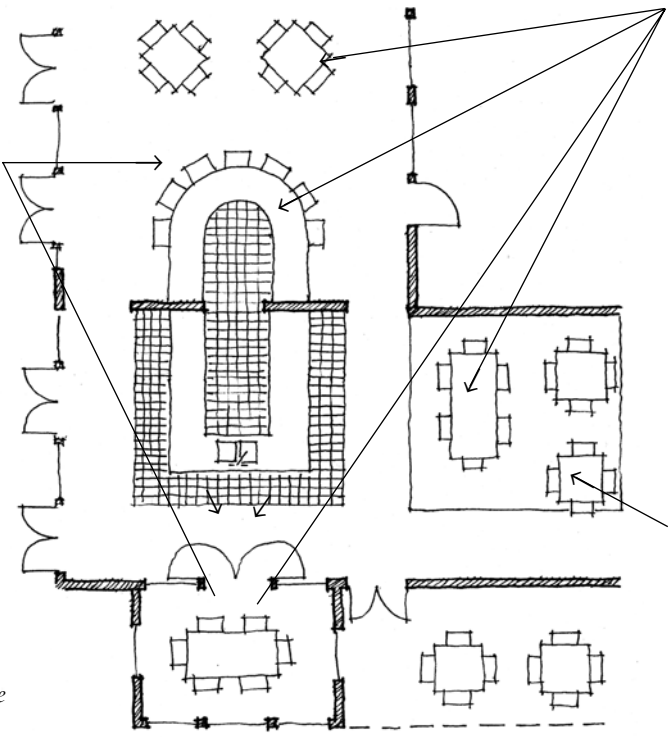
Functional Abilities: Providing four dining areas, each responding to different functional abilities, enhances the likelihood of optimizing independence.
Familiarity: Dining is an activity best cued by creating familiar settings for eating (e.g., café, breakfast room, restaurant dining room, patio dining).
Social Interaction: Social contact is most likely to occur in distances of 4 feet or less and in small groups, meaning dining is best done in tables of 4 people or fewer and in spaces occupied by 16 or fewer.

Figure 8.26. *Socially Supportive Dining*

Design Response

Socially Supportive Dining (figure 8.26) suggests that both the physical and organizational design respond to the range of participant abilities within adult day settings that serve people with dementia. Dining should occur in a space that is visually and spatially distinct from other program settings. Multiple settings suitable for dining should be provided as necessary to accom-

Figure 8.27. *This center supports social dining through providing an array of options including two- and four-person tabletops as well as an eating bar that seats eight (toward the back of the picture) for those requiring closer staff attention.*

modate the daily census. No single dining setting should serve more than sixteen participants because unpredictable social and sensory stimulation is likely to result. Participants should be allowed to choose where and with whom they sit during meals and snacks. Dining tables (seating 4–6 people) should be reserved for meals and snacks, and rarely, if ever, used for other programmed activities. Typical residential or restaurant-style tableware (no paper plates, plastic silverware, or plastic trays) should be used. Mealtime assistance, whether individual or provided to the group at a table, should be natural, dignified, and unobtrusive.

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BOX 8.4.3

Café at the Heart

Realm of Activity:

- Cooking and Dining

Key Experiential Attributes:

- Supporting functional independence
- Quality sensory stimulation
- Continuity of the self
- Meaningful activities
- Social interaction

Activity to Be Accommodated:

- Social dining

Anticipated Pattern Benefits:

- Familiar activity setting is reassuring and mnemonic (acts as a memory-prompting reminder of setting-specific behavior)
- Affords informal and spontaneous social interaction, easing staff responsibility for activity stimulation
- A centralizing setting that allows the organization flexibility during those periods of the day when census is low

Pattern 8.4.3. Café at the Heart

Problem Statement

Social dining affords one of the greatest opportunities for human interaction. Food serves as a useful catalyst for social engagement. This is why we often invite friends or colleagues out for coffee or drinks when we wish to talk. Given that the beginning and the end of the day are often difficult for participants and staff, it may be useful to offer dining experiences at those times. Dining settings must be familiar, easy to understand, and offer a range of activities in which the participants may independently engage.

Spatial Requirements

In our culture, one of the more common props for facilitating social engagement is food, epitomized by the "coffee klatch." Here the food is secondary to the desire for social exchange, yet the coffee or coffee cake serves as the fulcrum for the interaction. We often engage in social dining activities before or after work, and thus they typically occur in the morning or late afternoon. Both are transitional times (between work and home) that parallel the transition between home and adult day care found in our settings. Thus, employing this pattern may ease these transitional periods.

What one looks for in these settings is table seating that allows people to sit across from or adjacent to one another so they can converse and that provides a surface on which to place their food. Small tables that accommodate two to four people typically work best in these situations. Seating that provides a view outside to nature or for people watching is optimal.

Design Response

Café at the Heart (figure 8.28) places a highly familiar semi-public setting, rich with activity potential, at the core of the facility. Café at the Heart provides a transition between the main entry and less public program settings. By their nature, cafés are welcoming, relaxed, and informal settings, characteristics that are emulated in the Café at the Heart as well. By providing a range of seating options, the café can be comfortable for as few as two people or as many as sixteen. The scale of the space, the furniture arrangement, and the finishes should all cue the kinds of behaviors expected in cafés and diners. The café setting should have visual and physical access to adjacent activity areas as well as access to a secure outdoor space. The door to the main entry and reception area should be buffered from sight architecturally as well as programmatically.

Further Reading

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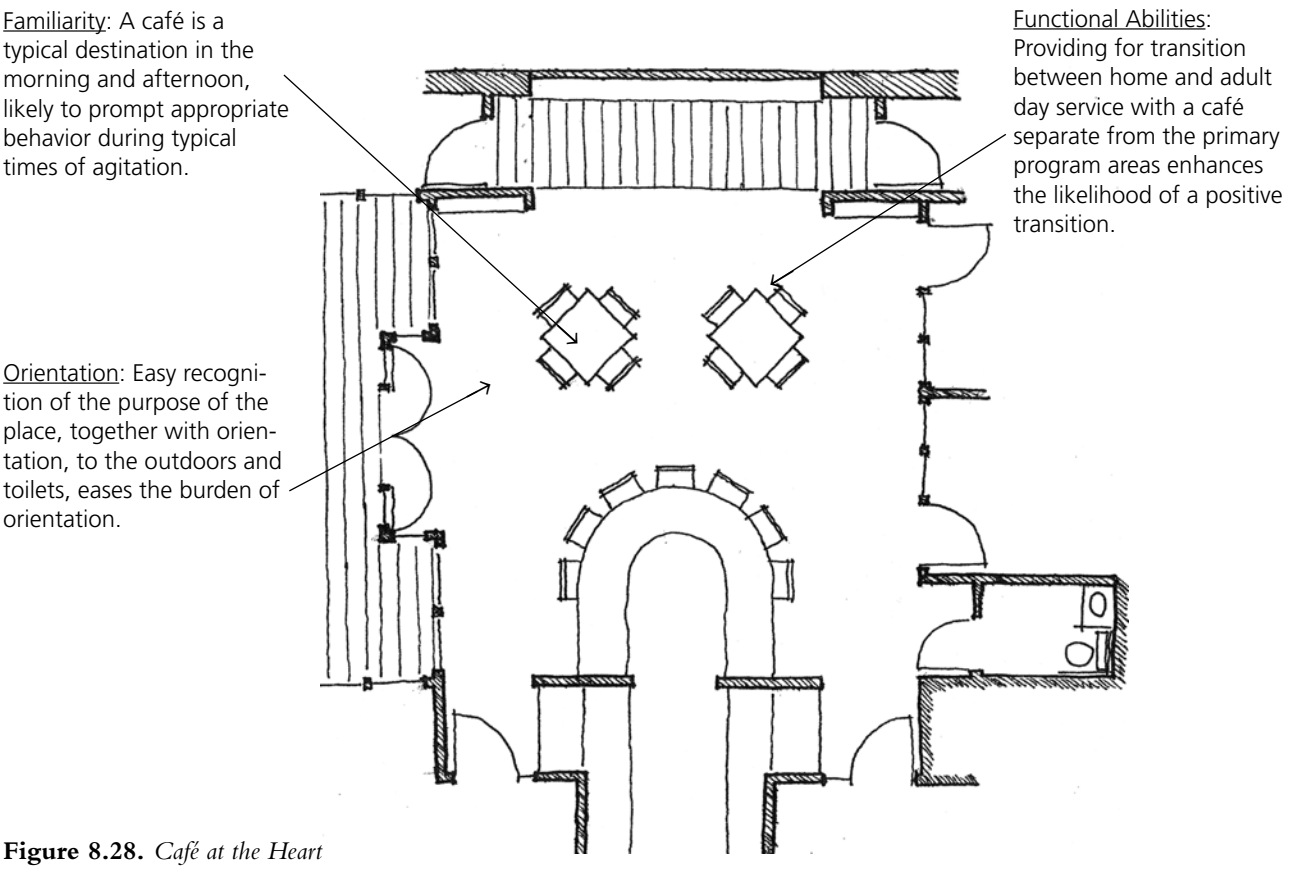
Familiarity: A café is a typical destination in the morning and afternoon, likely to prompt appropriate behavior during typical times of agitation.
Functional Abilities: Providing for transition between home and adult day service with a café separate from the primary program areas enhances the likelihood of a positive transition.
Orientation: Easy recognition of the purpose of the place, together with orientation, to the outdoors and toilets, eases the burden of orientation.

Figure 8.28. *Café at the Heart*

Figure 8.29. *Café at the Heart provides an easily recognizable semi-public setting at the most accessed point in the plan. Such a setting eases transition because it is familiar; it encourages success because activity is supported to the degree necessary; and it provides a refuge landmark from the rest of the program areas.*

Realm of Activity: Being Outside

Family members and organizations that provide care for those with dementia fear the potential for participant elopement. This safety concern has led many long-term care facilities to limit access to the outdoors. Yet the therapeutic impact of the outdoors cannot be underestimated. For many centuries, both Western and Eastern cultural traditions have recognized the benefit of interactions with nature. More recently, increasing attention has been paid to the value of healing gardens (e.g., Marcus & Barnes 1999), and particularly the role that interactions with nature play in providing restoration from stress. Reduced stress is an important outcome in and of itself, but stress also plays an important mediating role in producing numerous psychological, physiological, and behavioral changes (Gatchel, Baum, & Krantz 1989). Often stress is only associated with overstimulation, but Ulrich (1999, 34) points out that "patients in nursing homes and other long-term care contexts often suffer from depression and boredom related to social-physical environments that are chronically understimulating and hence stressful—rather than overstimulating and stressful." Stress from stimulation is not so much an issue of quantity as it is of coherence.

When adult day center participants, particularly those with dementia, are constantly challenged or bored by their environment, their mental and physical energy are drained. We experience this in all-day meetings or conferences where we are cooped up in a room for several hours—many people's first instinct during breaks is to "get a breath of fresh air." What we and adult day participants are experiencing is what Kaplan (1995) refers to as Directed Attention Fatigue (DAF). According to Kaplan, when we are cognitively fatigued, we progressively lose our ability to filter out distraction and make plans, and we become more irritable and reactionary, resulting in an inability "to deal with situations in which the appropriate action is not immediately obvious" (1995, 171). Kaplan's work suggests the need to provide opportunities for restorative experiences.

Healing gardens provide restoration because they possess attributes that are thought to mitigate stress: control, social interaction, physical movement, and access to nature (Ulrich 1999). Access allows participants to perceive and understand the environment; in other words, it confers a sense of orientation, which makes the environment accessible as well as safe.

Relevant experiential attributes for Being Outside are:

- Personal control
- Social interaction
- Orientation
- Safety

System of Activities

The activities of Being Outside can be quite diverse, and the planning and design of such activities likely warrants a book of its own. Here we will simplify the realm of Being Outside as being constituted of five distinct activities:

1. Transitioning from inside to outside
2. Locomotion
3. Sensing

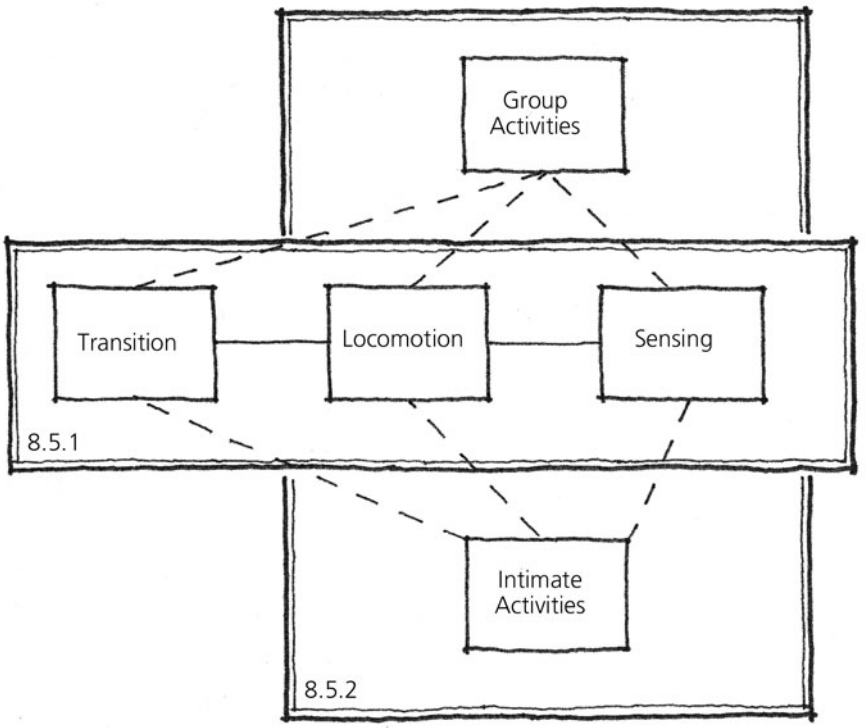

Figure 8.30. *Diagram relating the system of activities and the system of settings for Being Outside*

4. Intimate activities
5. Group activities.

Three of these activities are essential: transitioning from inside to outside; locomotion; and sensing. Both intimate and group activities are probable activities.

System of Settings

Design should facilitate the five activities in the system of activities outlined above. Three have been identified as essential to any experience of Being Outside, while two others are possible. The ubiquitous activities of Being Outside involve sensing the outdoors and moving through or locomoting through the outdoors. The act of transition is important in that it involves both locomotion and sense but is the act of moving from inside to out. Together, those three activities constitute a critical sequence that should be carefully orchestrated through design. The social activities, whether intimate or group, also depend upon the locomotion and sensing of people; they cluster together to inform what an outdoor setting should afford from a largely psychosocial perspective. As seen in figure 8.30, Pattern 8.5.1, Transitional Gradient, must facilitate the transition from being inside to outside, keeping a focus on the issues of movement and sensory stimulation. Pattern 8.5.2, Restorative Garden, must focus on the provision of meaningful environmental characteristics that would enhance psychosocial well-being.

BOX 8.5.1
Transitional Gradient

Realm of Activity:
- Being Outside

Key Experiential Attributes:
- Personal control
- Social interaction
- Orientation
- Safety

Activity to Be Accommodated:
- Transition, locomotion, sensing

Anticipated Pattern Benefits:
- Reduction of agitation stemming from the regulation of stimulation
- Enhanced safety and security due to the regulation of stimulation
- Enhanced use of outdoor space due to the ability to find a place of comfort

Pattern 8.5.1. Transitional Gradient

Problem Statement

Outdoor environments provide wonderful opportunities for restoration; however, they often are underutilized. One reason for this is that the transition from inside to outside involves significant sensory changes that can readily overwhelm the ADC participant, precipitating a loss of control and producing anxiety. Easing the transition from inside to outside will enhance a participant's sense of control by reassuringly suggesting that he or she will find a place of comfort.

Spatial Requirements

This pattern should facilitate three activities: transitioning, locomotion, and sensing. Transition involves the other two but highlights the sense of change that one experiences while moving from inside to outside. Some of these changes include moving from a controlled thermal environment to one that is largely uncontrolled, a significant difference in lighting conditions, and differences in sources of stimulation. Due to the significant change in sensory conditions, ADCs should make locomotion as easy as possible so that it can be as unconscious as possible. In this way, participants can focus on the changing sensory conditions—the rationale for going outside in the first place.

For locomotion to be as easy as possible, environmental barriers should be minimized (see Pattern 8.2.2). This means the path of travel should be evident and as consistently reliable as possible in terms of levelness, mate-

rial, and so forth. Edges between the path of travel (hardscape) and the softscape (e.g., grass) should be gradual or at least cued through sensory differentiation. Pathways should be at a minimum 6 feet wide, with 9 inches of textured concrete on each side to aid orientation for the visually impaired. A place of rest should be provided within 30 feet of any point for both the ambulatory and those that are wheelchair assisted.

Careful consideration needs to be given to the spatial requirements arising from the change in sensory conditions between outside and inside. Inside the adult day center, participants are fully enclosed; lighting levels and temperature are uniform. Outside, both lighting and temperature are highly variable. The ability of the elderly to adapt to these changes is slow, and therefore the transition from inside to outside should not be abrupt but should occur gradually. In terms of enclosure, this means that exposure should occur slowly, with the overhead plane giving way last. Lighting conditions should slowly reveal the bright sunlight; for example, a roof may transition into a trellis with vines that filter sunlight. These enclosure and materials adjustments will create what are called "micro-climates"—areas that will vary in terms of temperature, solar heat gain, and wind. Effective design features such as plantings that serve as wind breaks, trees that provide shade, and the enclosure created by the building mass itself can extend the time and season of use of outdoor spaces. They also make it more likely that participants can find a comfortable outdoor setting.

Design Response

A Transitional Gradient (figure 8.31) conveys the concept that movement from inside to outside should be characterized by a graduation in the experience of sensory stimuli. If the inside environment is characterized as temperate, the outdoor environment is untempered, or natural. Between these two extremes, zones should allow for gradual transition from one condition to the other. Generally speaking, there should be four micro-climates within

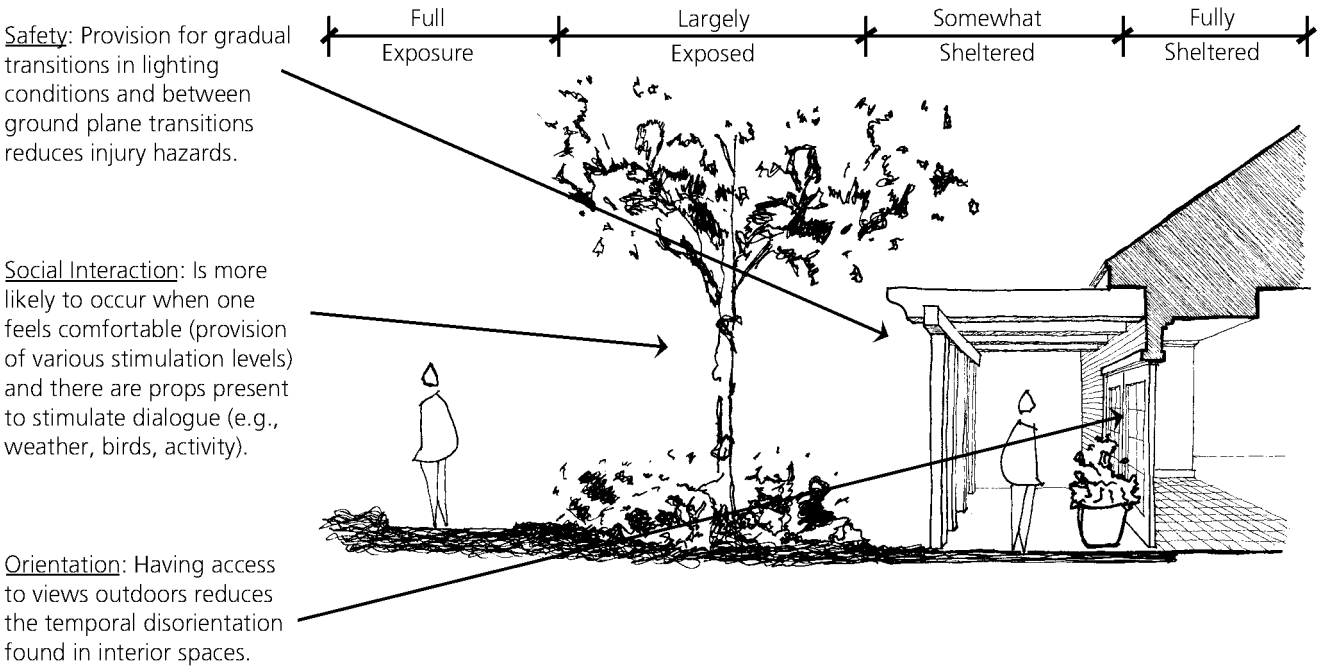
Full Exposure
Largely Exposed
Somewhat Sheltered
Fully Sheltered
Safety: Provision for gradual transitions in lighting conditions and between ground plane transitions reduces injury hazards.
Social Interaction: Is more likely to occur when one feels comfortable (provision of various stimulation levels) and there are props present to stimulate dialogue (e.g., weather, birds, activity).
Orientation: Having access to views outdoors reduces the temporal disorientation found in interior spaces.

Figure 8.31. *Transitional Gradient*

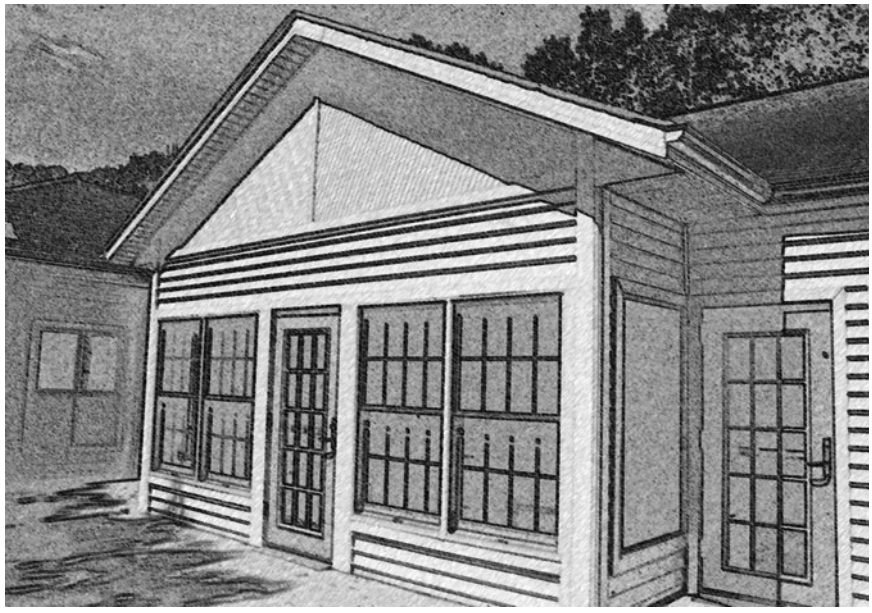

Figure 8.32. *Providing a gradient in one's transition from outside to inside is important. While this solution could use more of a canopy to provide protection from the sun, it does enter into a recessed area from the main activity space, allowing a sense of transition as one enters from outside.*

the transitional gradient: completely sheltered (interior), somewhat sheltered, largely exposed, and fully exposed. Particularly salient are issues of light, wind, and precipitation.

Further Reading

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Pattern 8.5.2. Restorative Garden

Problem Statement

Engagement with natural environments produces valuable and wide-ranging benefits that renew capacity to deal with stress and enhance health outcomes (Kaplan & Kaplan 1989; Ulrich 1995). However, participant motivation and staff initiative are critical factors in utilizing and realizing the benefits of outdoor spaces (Bite & Loverling 1985). The outdoors provides significant challenges to safety (i.e., accessibility, exposure to climatic elements, elopement potential) that must be addressed. Outdoor activity programming, coupled with visual and physical access into secured outdoor areas, constitute an essential pattern for adult and dementia day centers.

Spatial Requirements

This pattern should facilitate four activities: locomotion, sensing, intimate activities, and group activities. Walking paths should be flat and smooth to

BOX 8.5.2
Restorative Garden

Realm of Activity:
- Being Outside

Key Experiential Attributes:
- Personal control
- Social interaction
- Orientation
- Safety

Activity to Be Accommodated:
- Locomotion
- Sensing
- Intimate and group activities

Anticipated Pattern Benefits:
- Therapeutically beneficial diversion that can reduce anxiety and agitation
- Enhanced sense of orientation to time and place
- Increased expression of retained functional abilities
- Enhanced sleeping and behavioral patterns
- Increased participant, family, and staff satisfaction

accommodate the different mobility needs of participants. The garden should offer a variety of visual, olfactory, auditory, and tactile stimulation. Outdoor spaces can provide day center participants with a wide range of manageable activities that allow for self-pacing and participation at varying levels of ability. Gardening is made up of a series of highly routinized steps that can be broken down and engaged in according to participants' abilities, giving all a chance to participate and achieve success. While places of retreat and solitude should be provided within secured outdoor gardens, so too should the full gradient of social spaces discussed in Pattern 8.2.3, Privacy Gradient. A sense of social interaction relies on the ability to control exposure to others; social interaction is more likely to occur when an individual feels in control. This means that staff observations should be as unobtrusive as possible to extend this sense of autonomy and freedom.

Design Response

The Restorative Garden (figure 8.33) is a secure outdoor space to which participants have free access throughout the day. Windows in the primary program space facilitate unobtrusive observation by staff as well as other participants. A flat and smooth garden walking path accommodates the different mobility needs of participants (wheelchairs, walkers, those with a shuffling gait). Interspersing small raised and ground-level beds of flowers, vegetables, and herbs with familiar garden elements such as fountains, benches, and decorations (flags, gnomes, animals, etc.) provides a sense of

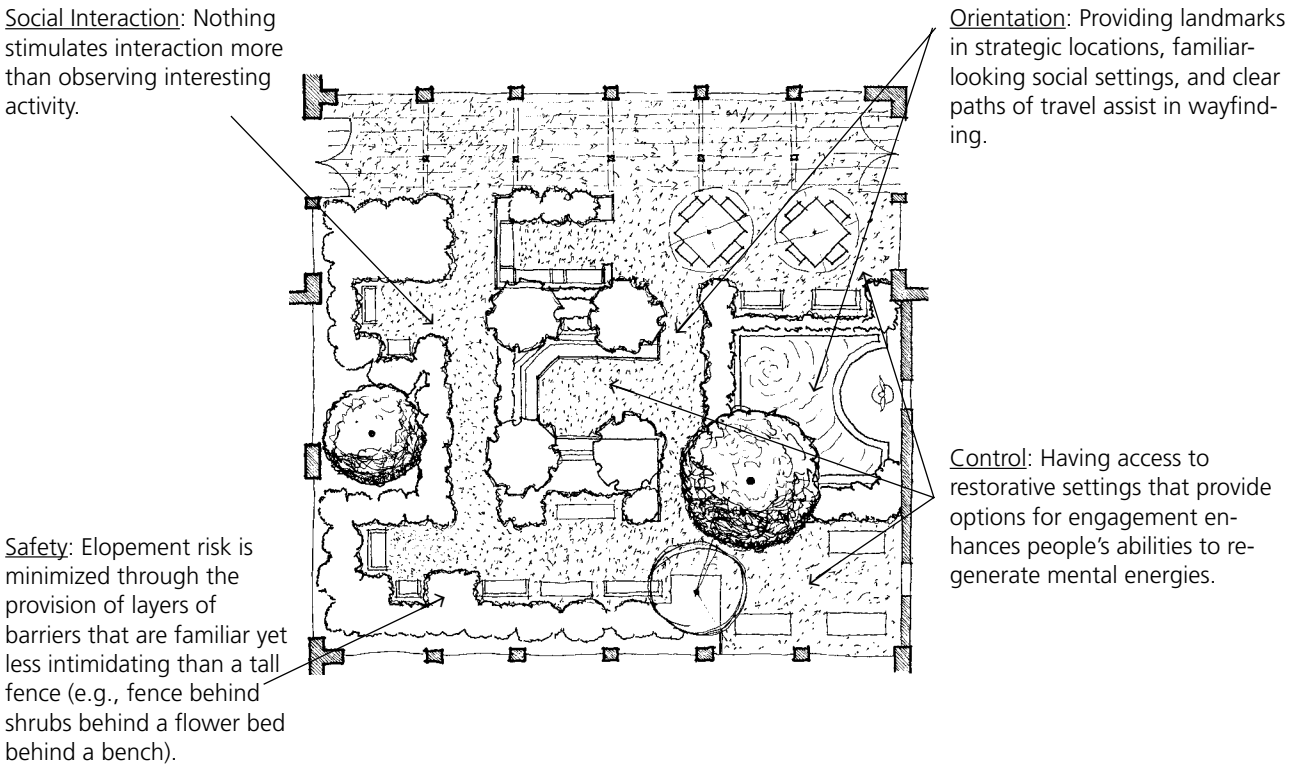
Social Interaction: Nothing stimulates interaction more than observing interesting activity.
Orientation: Providing landmarks in strategic locations, familiar-looking social settings, and clear paths of travel assist in wayfinding.
Control: Having access to restorative settings that provide options for engagement enhances people's abilities to regenerate mental energies.
Safety: Elopement risk is minimized through the provision of layers of barriers that are familiar yet less intimidating than a tall fence (e.g., fence behind shrubs behind a flower bed behind a bench).

Figure 8.33. *Restorative Garden*

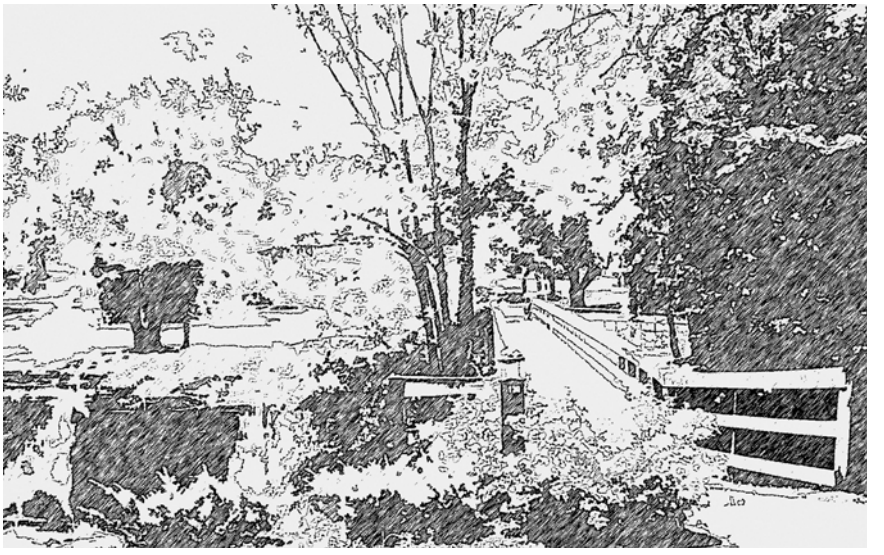

Figure 8.34. *Daily life can be stressful, particularly for those with dementia whose impairments create barriers to a variety of physical and mental activities. Research supports the role of nature in the restorative process. Pleasant, activity-inducing outdoor environments should be considered essential to successful adult day settings.*

full-sensory discovery. Every plant, regardless of familiarity, should be investigated with regard to toxicity before it is planted in the garden because people with dementia may pick flowers, leaves, berries, or fruits and eat them without awareness of potential danger. Gardening tasks should be a regular programmed activity, supplemented by other meaningful activities such as hanging clothes, playing lawn games, or mowing lawns with a push mower.

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Conclusion

The sixteen prescriptive patterns discussed in this chapter can enhance the therapeutic potential offered by the five Realms of Activity we characterize as having a strategic orientation toward viewing Life as Activity. Of course, prescriptive patterns are generalized and need to be negotiated within the context of each specific project. However, the process by which these patterns were developed—with a careful consideration of the needs of all participants of place (participants, families, staff, organization); the experiential attributes one seeks to engender; and balancing the demands of people, program, and the physical setting—will lead to more therapeutically beneficial adult day centers for all involved. This is what we mean by Designing a Better Day. But the story is not over. The orientation toward Health and Rehabilitation is an equally important dimension in the life of an ADC, and those prescriptive patterns are presented in the next chapter.

9.

Prescriptive Patterns to Facilitate Health and Rehabilitation

While the preceding chapter focused on patterns that facilitate the activities we placed under the umbrella Life as Activity, this chapter focuses on patterns related to Health and Rehabilitation. Three Realms of Activity come under the umbrella of Health and Rehabilitation: Personal Care: Toileting, Personal Care: Bathing, and Physical and Support Activities. For each realm of activity, we have developed two prescriptive patterns that will support these vital, adult day service setting activities.

Realm of Activity: Personal Care: Toileting

Toileting is an essential part of everyday life with significant implications for quality of life. Once trained, we engage in this activity independently and expect to do so throughout our entire lives. For many ADC participants, this is not the case; and in fact, family caregivers report incontinence as one of the most burdensome effects associated with Alzheimer disease and a likely rationale for seeking adult day services (Pynoos & Stacey 1986). Caregiving practices need to focus on providing support, as should the physical environment, but the need to emphasize toileting independence in this realm of activity cannot be overlooked.

Several essential dimensions to the toileting experience stem from the concept of promoting independence. First, a sense of autonomy is enhanced if one perceives a sense of control. Certain caregiving practices can enhance this sense; they include chaining, where the caregiver initiates the activity but allows the participant to take over independently, and mirroring, where the caregiver models the expected behavior (Hellen 1998). Privacy regulation also enhances control, particularly given that toileting activities are typically done in private. Independence is also enhanced through the support of functional abilities. Given that ADC participants' needs are heterogeneous, it is important to provide a range of toilet room types (independent, fully accessible; one-person assist; two-person assist). A range will help staff and participants to find the environments that most closely match needs. Finally, because personal care is such an intimate activity, fear and anxiety can easily be aroused. Instilling a sense of safety and security associated with the activity lessens the likelihood that participants will feel anxious or scared.

Relevant experiential attributes for Personal Care: Toileting are:

- Control
- Privacy
- Supporting functional independence
- Safety and security

System of Activities

The activity of toileting involves a series of tasks ranging from identification of need, to the return after completing the act. Physical and cognitive limitations may exacerbate incontinence; moreover, activity time may compound the issue. This system includes, but is not limited to, the following activities:

1. Locomoting to the toilet
2. Removing appropriate clothing
3. Transferring to the toilet
4. Toileting
5. Clean-up
6. Transferring from the toilet
7. Redressing
8. Hand-washing/drying
9. Return locomotion

Care assistance may be required for each of these activities, and thus toileting can be quite staff intensive, potentially taking upward of twenty minutes for an incontinent participant. As such, supportive and accessible spatial organization and configuration of toilets will enhance both staff efficacy and quality of life outcomes.

System of Settings

As seen in figure 9.1, all nine activities outlined above are essential to successful completion of the toileting realm of activity and should inform required system of settings. Locomotion issues that have to do with distance to the toilet, the path of travel, and whether one can readily identify the toilet are addressed in Pattern 9.1.1. The seven remaining activities all occur within what is referred to as the toilet room or restroom, addressed here in

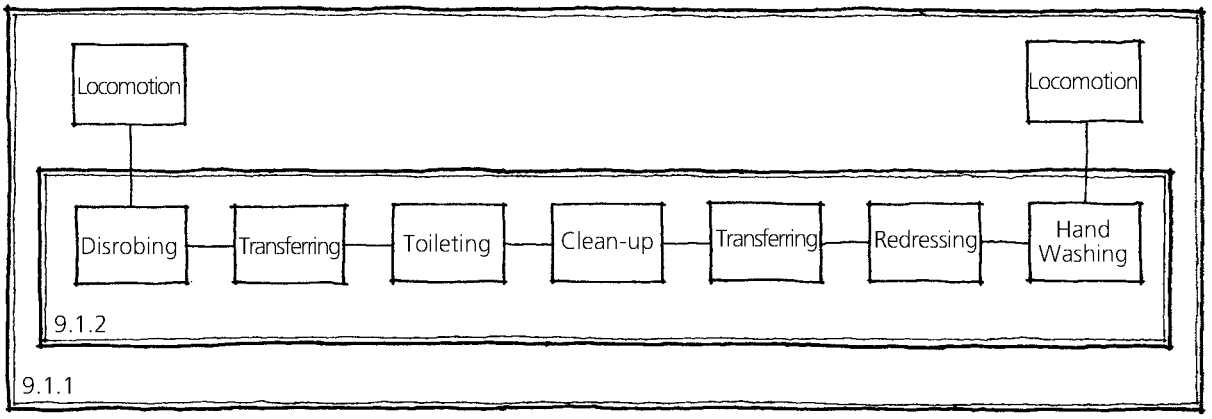

Figure 9.1. *Diagram relating the system of activities and the system of settings for Toileting*

BOX 9.1.1
Toilets Distributed Throughout

Realm of Activity:
- Personal Care: Toileting

Key Experiential Attributes:
- Control
- Privacy
- Supporting functional independence
- Safety and security

Activities to Be Accommodated:
- Locomoting to the toilet
- Return locomotion

Anticipated Pattern Benefits:
- Fewer catastrophic reactions and agitation during the toileting experience
- Enhanced independence in toileting activities
- Ability to serve a greater diversity of clientele for a longer period of time
- Improved staff efficiency

Pattern 9.1.2. Because of the traditional cultural response of having one setting serve this familiar system of activities, a similar approach should be utilized in the design of adult day services.

9.1.1. Toilets Distributed Throughout

Problem Statement

Toileting is an important activity in relation to perceived independence. As such, every effort should be made to support participant independence. Toilets that are close to activity centers and easily recognized are most likely to be used; centralized or hidden toilets demand greater physical and/or cognitive competence in order to be used successfully.

Spatial Requirements

Locomotion to the toilet is heavily affected by wayfinding abilities and environmental barriers. Thus, spatial placement of toilets is critical to how well they may foster sustained levels of toileting independence. Placing visible toilet rooms a short distance from activity areas along clear circulation paths may enhance independent use. This configuration may allow some participants who would need assistance in other environments to require only verbal prompts from staff.

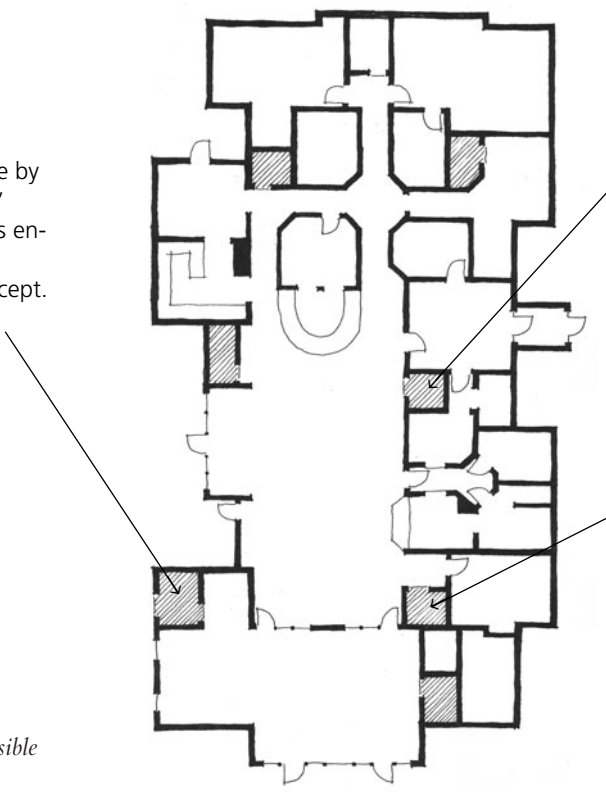
Functional Abilities: Independence in toileting is enhanced by placing toilets where they are needed and are visible.
Control: When toilets are close by and in plain view, participants' control over bodily functions is enhanced. Toilet access from the outdoors is an interesting concept.
Safety: Safety is enhanced when toilets are located a short, clear travel distance away from program settings.

Figure 9.2. *Distributed, Accessible Toilets*

Design Response

Distributed, Accessible Toilets (figure 9.2) conveys the need to provide an appropriate number of private, home-like toilet rooms distributed throughout the facility, proximate to activity areas and/or circulation paths, that serve a range of assistance needs (i.e., independent, accessible; one-person assist toilets; and two-person assist toilets). Toilet rooms should be visible from the program spaces, and toilet-related sounds and smells controlled without impeding visual access or privacy. In accord with NADSA guidelines for serving those with cognitive impairments, accessible, respectful toileting should, at minimum, provide a ratio of at least one toilet for every six participants, and toilet rooms must be located within 40 feet of program spaces.

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9.1.2. Respectful Toileting

Problem Statement

Toileting is a life-long private routine that often becomes neither private nor routine for ADC participants with cognitive impairment. These losses can

BOX 9.1.2
Respectful Toileting

Realm of Activity:
- Personal Care: Toileting

Key Experiential Attributes:
- Control
- Privacy
- Supporting functional independence
- Safety and security

Activities to Be Accommodated:
- Removing appropriate clothing
- Transferring to the toilet
- Toileting
- Clean-up
- Transferring from the toilet
- Redressing
- Hand-washing and drying
- Return locomotion

Anticipated Pattern Benefits:
- Fewer catastrophic reactions and agitation during the toileting experience
- Enhanced independence in toileting activities
- Ability to serve a greater diversity of clientele for a longer period of time
- Improved staff efficacy

have significant consequences for personal self-esteem and dignity. A two-level strategy is most effective: Participants are encouraged to use toilets independently, and staff are expressly trained to provide appropriate care as needed.

Spatial Requirements

Toileting activities are largely personal and private in nature. Removal of clothing is a highly personal activity, and the demands for privacy are high. This same need for privacy applies to transferring, toileting, and clean-up. Because of this, it is highly recommended that toilet rooms be private. Transferring is a significant problem in toileting, and ganged toilets only exacerbate the problems. To facilitate access and transfer, Sanford (2001) recommends the following:

- Provide a 5′ turning radius in the toilet room for maneuvering a wheelchair
- Use out-swinging doors, not only to facilitate a 5′ turning radius but to allow entry by staff in the event of a fall or other incapacity

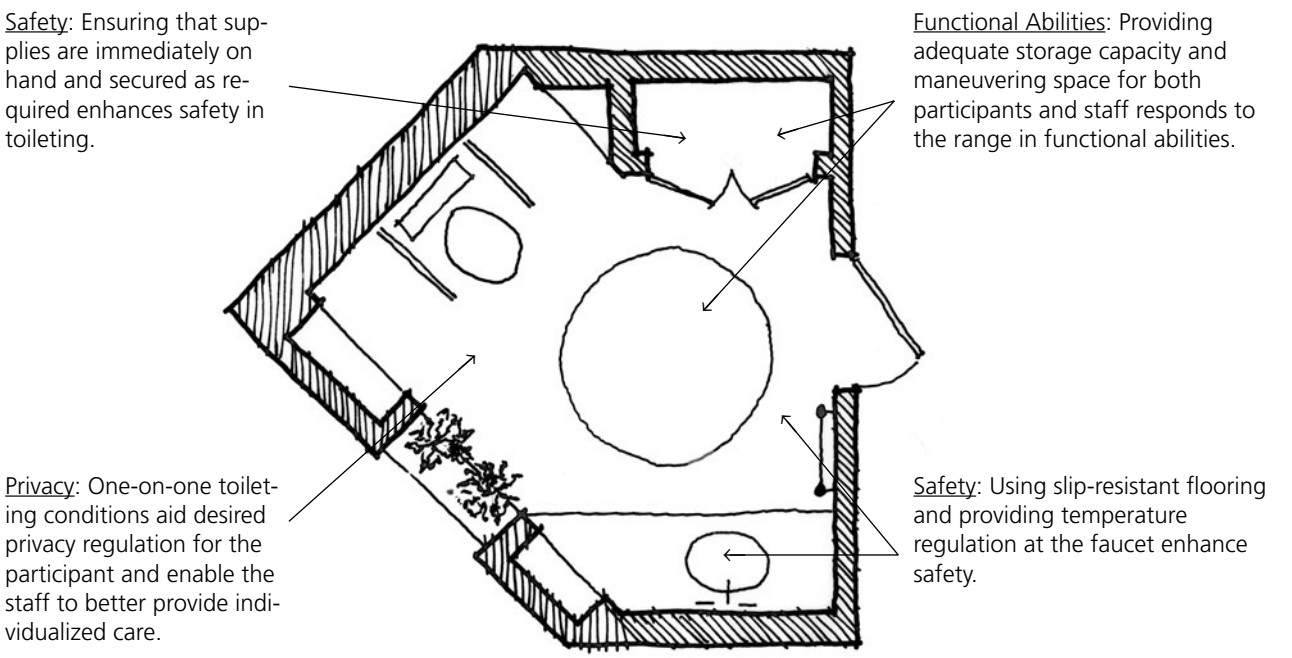
Safety: Ensuring that supplies are immediately on hand and secured as required enhances safety in toileting.
Functional Abilities: Providing adequate storage capacity and maneuvering space for both participants and staff responds to the range in functional abilities.
Privacy: One-on-one toileting conditions aid desired privacy regulation for the participant and enable the staff to better provide individualized care.
Safety: Using slip-resistant flooring and providing temperature regulation at the faucet enhance safety.

Figure 9.3. *Accessible, Respectful Toileting*

- Provide a minimum 24″ clearance between any obstruction (e.g., sidewall) and the side of the toilet seat to allow room for staff person assistance
- Permit rear- or floor-mounted swing-away grab bars on both sides of the toilet
- To facilitate access, design toilet rooms to minimize turning radii (e.g., doors on 45° angles).

The ability to clean up or wipe after toileting is often compromised among participants with dementia, and thus it is necessary to ensure staff accessibility for assistance with these activities. Access to supplies is also essential and should be well thought out. Hand-washing provisions should be made.

Design Response

Respectful Toileting (figure 9.3) conveys the need to provide private toilet rooms decorated in a residential fashion—for example, with attractive hand towels, pictures, plants or flowers, and candles. The lighting in toilet rooms should be sufficient and flattering. Storage for toilet-related items (wipes, gloves, incontinence products) is ample and convenient. Toilets should also be designed to serve a range of assistance needs (e.g., independent to two-person assists).

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Realm of Activity: Personal Care: Bathing

Assistance for personal care, including bathing, is one of the primary reasons that families seek adult day services for their elder family member (USHHS 1995). One of the primary dimensions to bathing is certainly hygienic, but the psychosocial aspect cannot be overlooked. Bathing limits infection, but many of the reasons for bathing have more to do with societal expectation than with hygienic needs per se. Eliminating body odor and cleansing hair may not be hygienically necessary, but these bathing activities make a person socially acceptable. Additionally, bathing satisfies psychological needs for relaxation and invigoration. Yet bathing in long-term care settings all too often focuses solely on the hygienic purposes, and care becomes task-oriented. Task orientation often leads to resistant behaviors from participants. One study of nursing home residents reported that 64.2 percent physically resisted; 63.5 percent verbally resisted; 63 percent hit or slapped, and 51.3 percent yelled or screamed (Sloane et al. 1995). Staff are caught between four opposing forces: (1) the efficiency required by the organization; (2) the "dirty work" of providing personal care (Emerson & Pollner 1975); (3) the "emotional work" of denying feelings for those in one's care; and (4) the needs and desires of the care participant. As a result, caregiver stress associated with personal care is often quite high, and staff as well as participant satisfaction with the bathing experience is quite low (Sloane et al. 1995).

Emphasis needs to be placed on the experience of bathing. In Western culture, bathing is typically considered one of the most private activities in life, and this attribute of the bathing experience should be maximized to the greatest extent possible. Creating a private setting for bathing will cue the intimate nature of the activity for participant and staff alike: "Bathing areas should be set up to be as reassuringly familiar and smoothly operational as possible. Bathing equipment that requires [people with dementia] to be suspended in unfamiliar contraptions will likely be perceived as strange, threatening, and undignified" (Hyde 1989, 39). Efforts to attenuate anxiety-producing stimuli are critical. Bathing is a multisensory experience, and therefore natural light, thermal comfort, quiet music, plants, and so forth can create a calming place. In a place of security, one feels more in control as fear is dissipated.

Relevant experiential attributes for Bathing are:

- Privacy
- Safety and security
- Quality sensory stimulation
- Continuity of self

System of Activities

The activity of bathing is quite complex and is simplified here to suggest a set of thirteen activities:

1. Transition from program to bathing area
2. Clothes removal and hanging
3. Transferring into the tub
4. Bathing
5. Drying
6. Hair brushing
7. Redressing
8. Transition to program
9. Clean-up
10. Hair cutting/washing
11. Nail care
12. Toileting
13. Personal storage

Each of these activities may require staff assistance, and thus bathing can be quite staff-intensive. Activities 1 through 9 occur with each bathing experience. Activities 10 and 11 are more periodic activities associated with hygiene that should also be accommodated. Given that these activities are associated with water, it is quite likely that toileting will be associated with this realm of experience as well. Finally, because bathing often is associated with changing clothes, personal storage is a likely activity.

System of Settings

The activities listed above are organized in terms of their respective settings in figure 9.4. As stated, activities 1 through 9 are essential to the bathing activity, while the other activities may be considered likely. Each activity has a significant impact on the psychosocial dimensions of the resulting experience. For instance, lack of cleanliness often prompts shame, exacerbated in some ADCs when a staff member calls a participant out of a group activity and announces that he "needs a bath." Clothing removal is an extremely intimate activity with significant potential for catastrophic responses. Once unclothed, the participant has a heightened sense of vulnerability, and therefore staff need to provide calm, reassuring words. Physical contact during bathing can exacerbate the participant's sense of vulnerability. The entire sequence is replete with potential landmines for therapeutic care. Thus, the

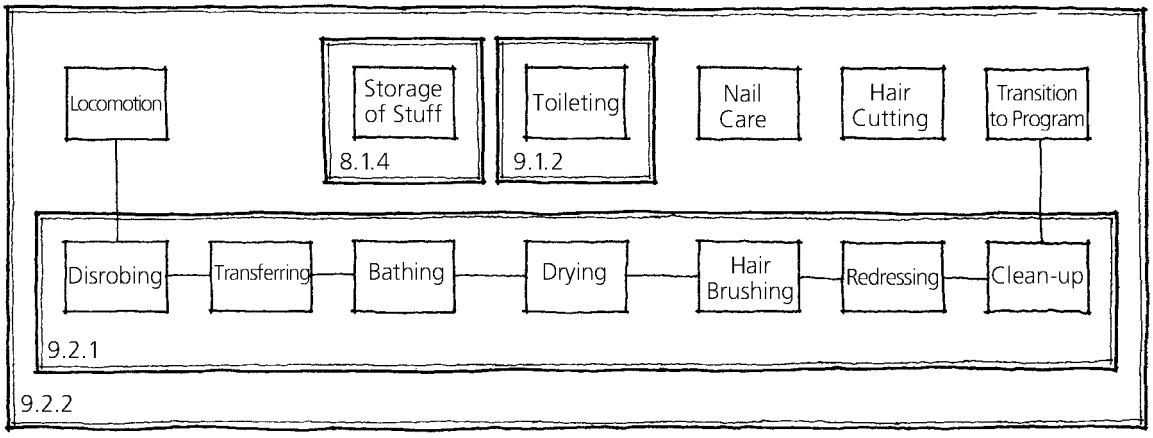

Figure 9.4. *Diagram relating the system of activities and the system of settings for Bathing*

bathing experience, as defined by activities one through nine, needs to be carefully choreographed. The other three activities are not intrinsic to bathing, but are likely to be associated with bathing and therefore constitute a setting unto themselves.

9.2.1. A Calming Place to Bathe

Problem Statement

For both the ADC participant and the care professional, assisted bathing is a difficult task. Bathing is such a personal and private activity that offers for help are not generally well-received, in particular among those confused by dementia. Feelings of vulnerability and loss of independence easily overshadow even well-intended efforts, resulting in stressful, unsatisfactory experiences for everyone involved.

Spatial Requirements

The transition from program space to bathing area is the ultimate public to private transition, especially since bathing entails undressing. As previously

BOX 9.2.1
A Calming Place to Bathe

Realm of Activity:
- Personal Care: Bathing

Key Experiential Attributes:
- Privacy
- Safety and security
- Quality sensory stimulation
- Continuity of self

Activities to Be Accommodated:
- Transition from program to bathing area
- Clothes removal and hanging
- Transferring into the tub
- Bathing
- Drying
- Hair brushing
- Redressing
- Transition to program
- Clean-up

Anticipated Pattern Benefits:
- Less catastrophic reactions and agitation during the bathing experience
- Enhanced hygiene, self-care, and infection control among participants
- Increased sense of satisfaction with the bathing experience for both staff and participants

described in Pattern 8.2.3, an essential environmental design strategy for easing this transition is the development of a privacy gradient. People seek refuge, safety, and warmth as they engage in private acts such as disrobing, and therefore it is best to provide a sequence of spaces that clearly reflects this transition from public to private. Additionally, areas for bathing should be designed to accommodate only one bather at a time so that privacy is institutionalized. For disrobing, a place to sit should be provided, and the room needs to feel enclosed and warm, not exposed. Places to hang clothes are needed, as are places for items such as bathrobes.

A side- or rear-entry tub optimizes retained abilities during transfer. The entire bath experience should be made as calming as possible. The room should be private and warm. Plenty of storage space close to the tub for soaps, towels, and the like facilitates an uninterrupted bathing activity. Spatial configuration and the absence of environmental barriers should promote ease of staff movement around the tub. Careful consideration for the sensory comfort of the participant is essential. Hair-drying and hair combing should occur while the participant is sitting, in front of a mirror. A vanity cabinet for holding hair dryers and brushes would be useful. Since redressing also requires a chair and mirror, these activities can take place in the same setting. Finally, clean-up of the bathing area is an essential consideration in good design. Typically, tubs need to be washed out after every bath to prevent infection; floors should be dried; and towels, bathrobes, and the like need to be restocked for the next participant. Secure storage of cleaning supplies in close proximity to the bathing area is essential.

Design Response

An effective design response to the need for A Calming Place to Bathe (figure 9.5) balances the privacy and assistance needs of participants. The appropriate organizational orientation toward bathing is therapeutic rather than custodial. The goal is to make A Calming Place to Bathe look and feel like a residential bathroom. At the same time, the bathroom needs to be large enough to accommodate both participant and care professional as well as bathing resources (e.g., soaps and towels). Because bathing is defined in our culture as a private activity, there must be only one tub or shower per bathing room, and only one participant should be bathed at a time. The sense of privacy should be reinforced by a privacy gradient (see Pattern 8.2.3) separating the quite private bathing rooms from the more public primary program spaces. Each bathing room should be decorated with homey and relaxing touches, such as fluffy towels and bathrobes, pictures and plants, and perhaps scented candles and soothing music. These decorations will not only give the bathing room a more familiar appearance but will also absorb sound, a problem associated with hard surfaces such as ceramic tile. The bathing room should be lit by some source of controlled natural light (i.e., translucent windows, skylights). There should be a private, comfortable dressing area in which a participant may disrobe, dress, and conduct personal grooming activities. A toilet should be adjacent to the bathing room. Storage for bathing and grooming supplies should be ample and convenient. Staff must adopt a soothing, reassuring, and accommodating demeanor to ensure a positive bathing experience. The warmth of the bather should be ensured through the use of heat lamps, towel warmers, and heated floors, if possible.

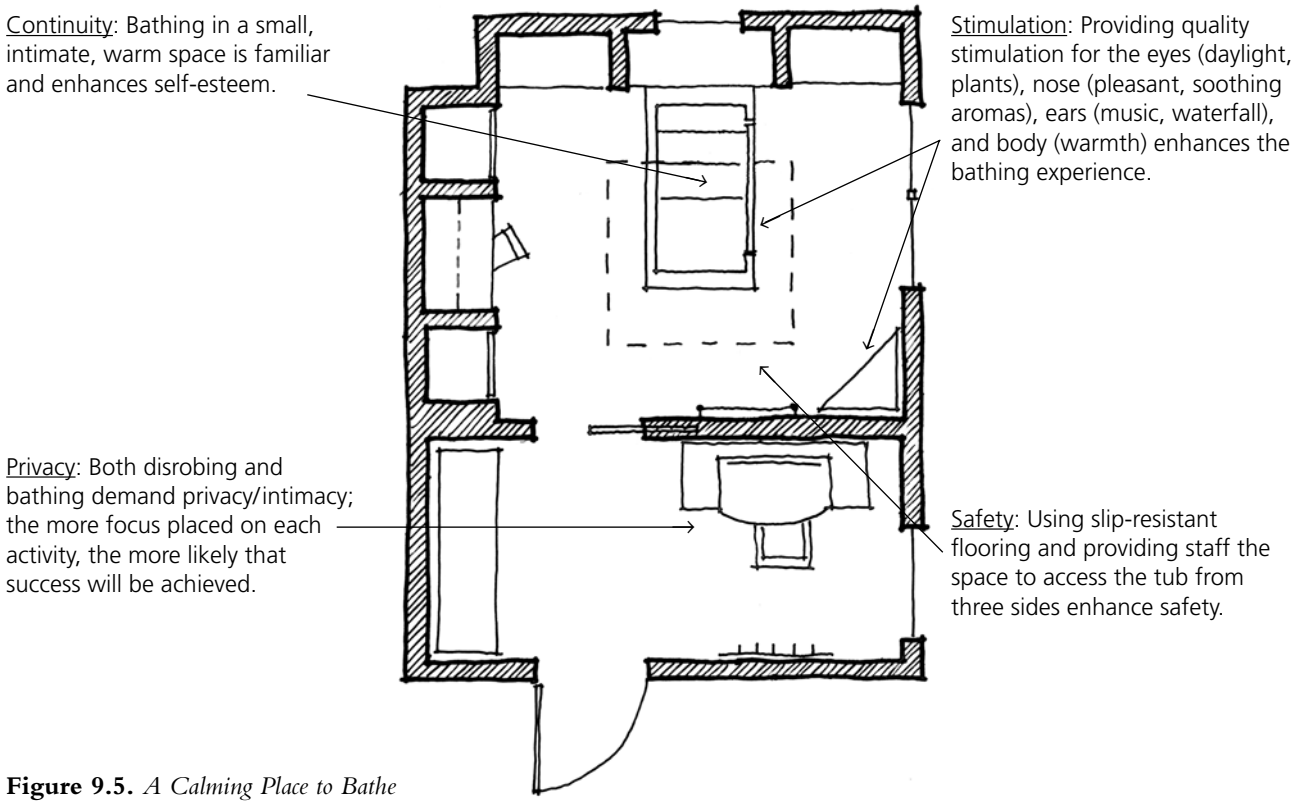
Continuity: Bathing in a small, intimate, warm space is familiar and enhances self-esteem.
Stimulation: Providing quality stimulation for the eyes (daylight, plants), nose (pleasant, soothing aromas), ears (music, waterfall), and body (warmth) enhances the bathing experience.
Privacy: Both disrobing and bathing demand privacy/intimacy; the more focus placed on each activity, the more likely that success will be achieved.
Safety: Using slip-resistant flooring and providing staff the space to access the tub from three sides enhance safety.

Figure 9.5. *A Calming Place to Bathe*

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9.2.2. Clustering Personal Care Activities

Problem Statement

While personal care activities such as bathing and toileting are often overlooked in the ADC development process, they afford great potential for psychosocial benefit. However, in many ADC facilities, private or semi-private activities often occur in public areas. Bathing and toileting tasks are completed in a perfunctory manner and considered supplementary tasks rather than opportunities for meaningful personal engagement and preservation of self-worth.

BOX 9.2.2
Clustering Personal Care Activities

Realm of Activity:
- Personal Care: Bathing

Key Experiential Attributes:
- Privacy
- Safety and security
- Quality sensory stimulation
- Continuity of self

Activities to Be Accommodated:
- Hair cutting and washing
- Nail care
- Toileting
- Personal storage

Anticipated Pattern Benefits:
- Creating familiar settings for care activities, thereby enhancing the likelihood of cooperative success
- Greater staff efficiency afforded by clustering similar activities
- Enhanced staff teamwork opportunities as an alternative to typically intensive one-on-one situations

Spatial Requirements

Several adult day service activities are associated with bathing. Two personal hygiene activities that have a particular social dimension are hair care and nail care. Both hair and nails need periodic attention, and certain social norms are associated with each. In fact, this merger between the hygienic and the social gave historical rise to the well-known place types of salons and spas. Because of their importance, we recommend that adult day services provide appropriate environments for hair and nail care activities. Hair cutting and washing require a hair washing sink and adjustable chair. Storage for scissors, brushes, shampoo, towels, and the like is necessary. Nail cutting typically requires a table with seating for at least two people. In both cases, a place for waiting may be quite appropriate, since both of these activities often stimulate social interaction. Finally, access to personal items such as clothing, incontinence supplies, and so forth is often needed.

Design Response

Clustering Personal Care Activities (figure 9.6) can more effectively support various care activities by providing an appropriate range of semi-private and private settings. Each personal care space should be decorated and furnished in a style that implies individualized attention and fosters human dignity. Personalized storage for participants' personal items (e.g., a favorite cologne or lotion, a change of clothes) should be conveniently located within the cluster and easily accessible to staff. Clustering will enhance staff teamwork, thereby affording greater potential for personal care activity success. Discrete

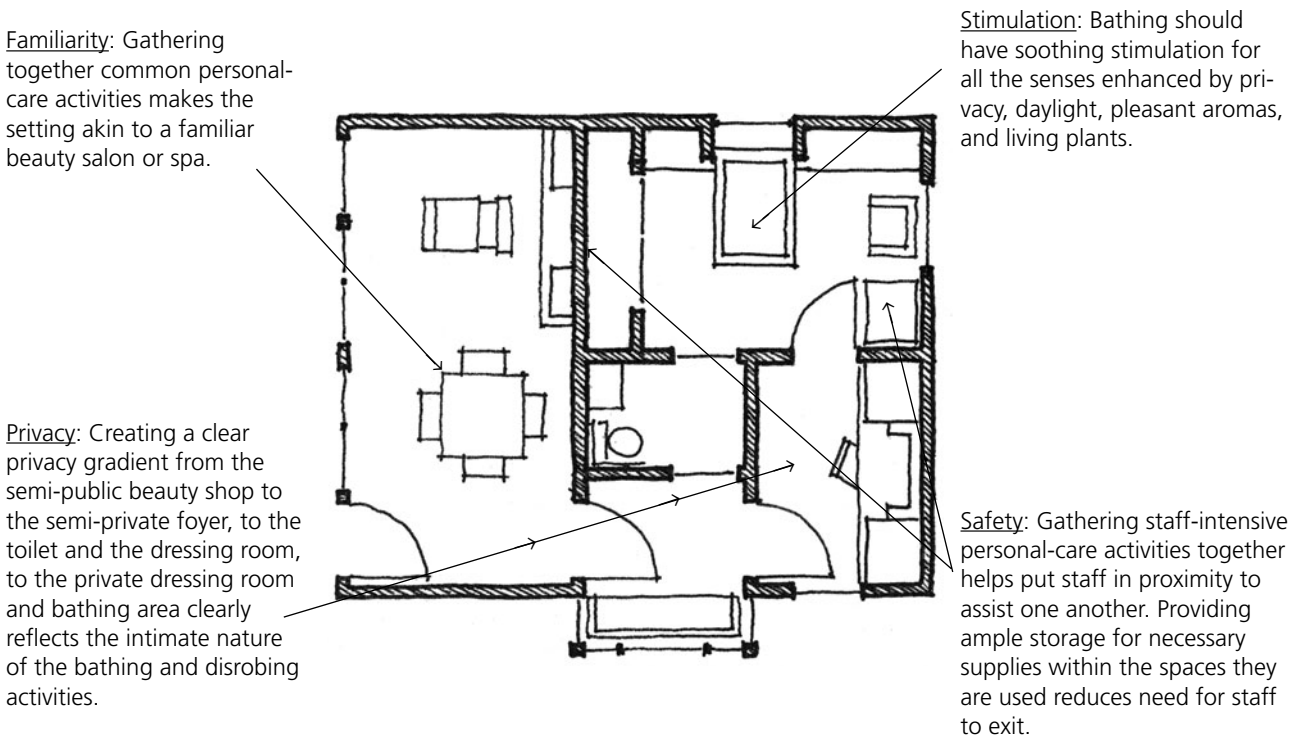

Familiarity: Gathering together common personal-care activities makes the setting akin to a familiar beauty salon or spa.
Stimulation: Bathing should have soothing stimulation for all the senses enhanced by privacy, daylight, pleasant aromas, and living plants.
Privacy: Creating a clear privacy gradient from the semi-public beauty shop to the semi-private foyer, to the toilet and the dressing room, to the private dressing room and bathing area clearly reflects the intimate nature of the bathing and disrobing activities.
Safety: Gathering staff-intensive personal-care activities together helps put staff in proximity to assist one another. Providing ample storage for necessary supplies within the spaces they are used reduces need for staff to exit.

Figure 9.6. *Clustering Personal Care Activities*

and familiar activity settings, such as a barber or beauty shop, will emulate recognizable social situations with the potential for facilitating social engagement, particularly as participants wait for their "turn" in the personal care activity. This quality of "gathering place" will have the secondary effect of enhancing staff-to-participant efficiency.

Realm of Activity: Physical and Health Support Activities

According to NADSA standards (2002), adult day centers that serve cognitively impaired persons are likely to offer services, including rehabilitative or supportive therapies, whether physical, occupational, or some other type of therapy. This is with good reason. According to a recent survey, most ADC participants are likely to need assistance with two to three activities of daily living (Cox 2003). Physically oriented activities should be provided within spaces that are suitably and intentionally designed for them. The primary characteristic of these activities is that they emphasize physical engagement for the purpose of enhancing the health of the body and the mind. This purpose is quite different from that associated with daily life activities, which emphasize mental and emotional engagement. As such, the environmental attributes associated with Physical and Support Activities are quite different than those associated with the other Realms of Activity.

All adult day care participants can benefit from physical exercise, even if the exercise simply entails transitioning from one space to the next. For some participants, more structured and targeted physical exercise may prove particularly beneficial. Since wellness and health activities are fundamentally different from the social activities that characterize the rest of the adult day center, it makes good sense to establish an area specific to these activities;

doing so will result in fewer distractions from nonparticipants and increased attention and compliance from participants, thereby maximizing functional abilities.

Wellness and health activities vary and require both public and private spaces, each with different props. Some spaces, however, can serve dual purposes. For instance, some of the environmental qualities associated with exercise areas (hard floor, bright light) work well for activities such as physical therapy, occupational therapy, blood drawing, and weight taking. However, exercise can certainly be a more social activity than physical therapy and weight taking, and props need to vary accordingly. Careful consideration of both privacy needs and stimulation demands will further enhance the overall goal of supporting functional abilities associated with this realm of activity.

Relevant experiential attributes for Physical and Health Support Activities are:

- Privacy
- Quality sensory stimulation
- Supporting functional independence

System of Activities

Physical and related support activities can range quite broadly within adult day settings. They range from beanbag tossing to weight-taking and administration of medications. The first activity (beanbag tossing) is likely to involve active bodily engagement and typically takes place in a group. Although they still involve the body, the other two activities are more passive and are best done in private. Thus the range of activities can be understood in terms of two dimensions: active-passive stimulation, and social to private. Within this framework, four types of physical activity conditions can be identified: active-social; active-private; passive-social; passive-private. However, it is difficult to imagine a passive-social physical activity. Something like a group sauna might fit this category, but certainly these types of physical activities are rare. The other three, however, are quite common.

Active-social activities would include typical group exercises such as stretching, beanbag tossing, and the like. Active-private activities might include therapies such as occupational and rehabilitative therapies. Passive-private activities could include administration of medications, dialysis, physical exams, and perhaps massage. All three of these types of activities are likely to occur in an adult day setting serving the cognitively impaired. Because the props required for these different activities are quite varied, storage becomes important. Additionally, since these activities involve the body, access to a toilet is a good idea, as is access to appropriate staff support areas. This results in six activities that constitute the Realm of Activity we have called Physical and Health Support Activities:

1. Physically active-social activities (e.g., stretching)
2. Physically active-private activities (e.g., rehabilitation therapy)
3. Physically passive-private activities (e.g., medical care)
4. Storage
5. Toileting
6. Staff support

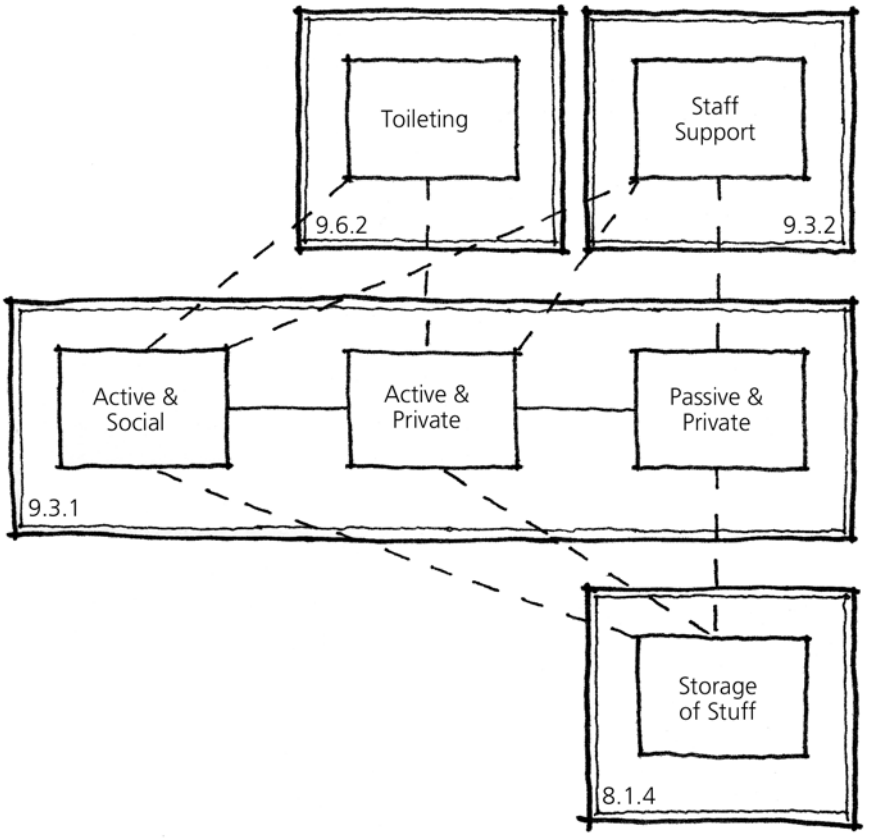


Figure 9.7. *Diagram relating the system of activities and the system of settings for Physical and Health Support Activities*

System of Settings

Figure 9.7 displays the system of activities and settings associated with the activity realm Physical and Health Support Activities. Physically active activities demand open, well-lit settings with hard surfaces. Ceiling height should be considered because too low a ceiling could limit some activities. Physically passive activities are likely to be private in nature and demand enclosure to ensure a one-on-one focus.

9.3.1. A Place of Wellness

Problem Statement

Many participants in day services require support in maintaining and maximizing their physical and mental health. Their support needs range widely in type and extent. Because these wellness needs have often been ignored, abilities and interests have languished, and engaging in these activities anew within the ADC setting can pose psychological as well as physical challenges. Thus it is important to establish a wellness orientation and intentionally create settings that effectively incorporate health and well-being activities into the adult day care environment.

Spatial Requirements

Physically active activities typically occur outdoors or in designated indoor areas. Indoor activity settings need to be quite open and well-lit, contain hard surfaces such as a wood floor (e.g., a gymnasium), and possess appropriate

BOX 9.3.1
A Place of Wellness

Realm of Activity:
- Physical and Health Support Activities

Key Experiential Attributes:
- Privacy
- Quality sensory stimulation
- Supporting functional independence

Activities to Be Accommodated:
- Physically active-social activities (e.g., stretching)
- Physically active-private activities (e.g., rehabilitation therapy)
- Physically passive-private activities (e.g., medical care)

Anticipated Pattern Benefits:
- Increased attentiveness to a wellness orientation throughout the ADC
- Health-related activities may be more manageable and less disruptive than in more traditional adult day programs
- More appropriately regulated stimulation should lead to less agitation and anxiety

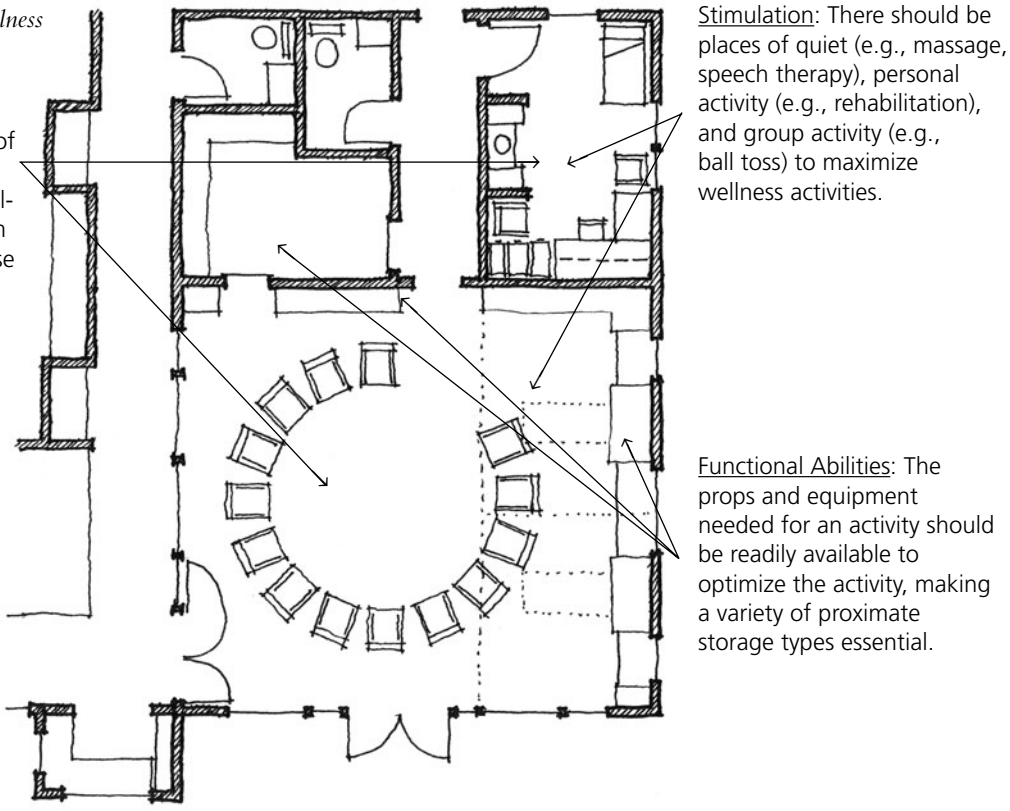
props (balls, beanbags, bungee cords, etc.). However, some physically active activities are private in nature, and the wide-open character of these spaces may be out of scale and inappropriate to the task at hand. Thus, the space should have the flexibility to be subdivided, which can make it useful for smaller group or individual activities, including physical therapy or rehabilitation. Note that successful use of exercise space for these related activities will require some provisions for privacy.

Physically passive and private activities should occur in more intimate settings. Because a significant range of activities could fall under this categorization, once privacy is provided, flexibility within the space becomes important. Lighting should be dimmable, with plenty of task lighting in appropriate locations. Storage for the various props needs to be carefully considered. Such storage may take the form of closets, shelves, cabinets, or a desk. Furniture selection and arrangement should be carefully considered in light of the various activities that may occur within that space.

Design Response

A Place of Wellness (figure 9.8) is a designated area dedicated to health and physical exercise. Two settings are necessary: one larger area—suitable for physical exercises designed for groups of up to sixteen participants with sufficient storage provided in different forms (closets, cabinets, etc.)—and a second smaller, semi-private space about the size and configuration of a small office. The larger setting should be designed with the capacity for subdivision to facilitate concurrent small group or semi-private activities (e.g., a mental health support group). The small office should be used for

Figure 9.8. *A Place of Wellness*


Privacy: Appropriate levels of privacy should be provided for the various types of wellness activities, ranging from large-group (12–16) exercise to private rehabilitation/ examination rooms.
Stimulation: There should be places of quiet (e.g., massage, speech therapy), personal activity (e.g., rehabilitation), and group activity (e.g., ball toss) to maximize wellness activities.
Functional Abilities: The props and equipment needed for an activity should be readily available to optimize the activity, making a variety of proximate storage types essential.

private activities such as medical exams, massage, or individual therapy sessions.

Further Reading

Gallup, J. W. (1999). *Wellness centers: A guide for the design professional*. New York: John Wiley & Sons.

Miller, P., & Butin, D. (2000). The role of occupational therapy in dementia—C.O.P.E. (Caregiver Options for Practical Experiences). *International Journal of Geriatric Psychiatry,* 15(1), 86–89.

Regnier, V. (2002). *Design for assisted living: Guidelines for housing the physically and mentally frail*. New York: John Wiley & Sons.

Schemm, R. L., & Gitlin, L. N. (1998). How occupational therapists teach older patients to use bathing and dressing devices in rehabilitation. *American Journal of Occupational Therapy,* 52 (4), 276–81.

9.3.2. A Place for Care Professionals

Problem Statement

Adult day care settings offer an immensely diverse range of services. NADSA groups them within categories: core, enhanced, and intensive. Increasingly, adult day care settings are adopting an interdisciplinary team approach toward developing a therapeutic program that integrates health and social disciplines. Integrating disciplines or breaking down boundaries and transcending old ways of thinking is difficult enough without a place in which to foster these new types of interactions. Integration tends not to occur unless there is a place for it.

BOX 9.3.2
A Place for Care Professionals

Realm of Activity:
- Physical and Health Support Activities

Key Experiential Attributes:
- Privacy
- Quality sensory stimulation
- Supporting functional independence

Activities to Be Accommodated:
- Support for professional staff

Anticipated Pattern Benefits:
- Increased effectiveness of staff
- Health-related activities may be more manageable and less disruptive than in more traditional adult day programs
- Less intrusiveness of private interactions occurring in public situations

Spatial Requirements

Flexible small group work settings foster office teamwork (Becker & Steele 1995). While each care professional planner needs a desk or surface to call his or her own, the space should be crafted so as to create pods of connected office areas that link with shared work areas consisting of tables, chairs, and pin-up space or marker boards for planning. These shared areas should be "hot," meaning that they are not permanently assigned, but rather may be utilized by various team configurations as needed.

Design Response

A Place for Care Professionals (figure 9.9) provides a cluster of private and semi-private work and support areas that promote team planning and implementation of an interdisciplinary plan of care. No cluster should be crafted for more than six professionals. If more than six members of the organization need to work interdisciplinarily, two or more clusters can be linked together with a shared meeting space, but each cluster should have no more than six professionals assigned to it.

Further Reading

Becker, F., & Steele, F. (1995). *Workplace by design*. San Francisco, CA: Jossey-Bass Inc.

Conclusion

It is our hope that the patterns in chapters 8 and 9 can serve as the basis for architectural programming, pattern generation, and ultimately, for the creation of enhanced, dementia-capable therapeutic environments for adult day

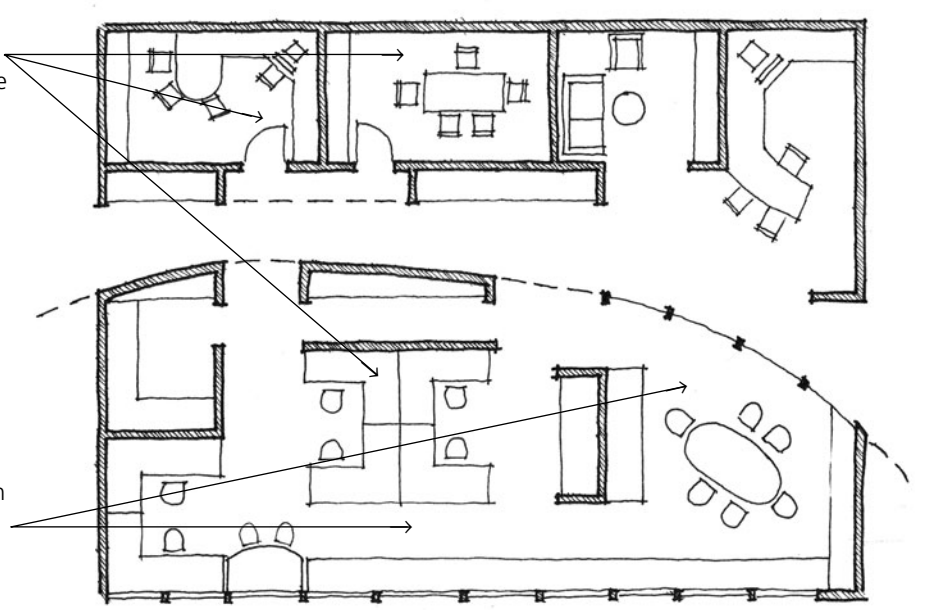

Privacy: Providing a range of potential working relationships (private desk, open group meeting, closed group meeting) enhances the likelihood of effective teamwork.
Stimulation: Providing a setting with a variety of stimulation levels (e.g., quiet to conversational) reduces the likelihood of Directed Attention Fatigue and promotes greater efficacy.

Figure 9.9. *A Place for Care Professionals*

service centers. While we feel confident that the implementation of these patterns will enhance therapeutic outcomes for participants, the patterns are best thought of as well-reasoned "best guesses." The design responses stem from a careful consideration of the various activities and are informed by environmental design research as well as by our professional experience with adult day centers—but they are not empirically proven.

We hope that rather than implementing these patterns exactly as they are, ADC development teams will use them as an outline while working through their own processes of activity programming and "place making." Organizations, programs, participants, and sites are all unique, and thus a pattern language should be developed for each adult day program. These chapters are best viewed as "how-to" guides for helping developers move from activity thinking to environmental design thinking.

We believe that quality adult day centers emerge through the careful negotiation of program and planning, with a steadfast focus on the purpose of the place. Quality of life is enhanced by quality places, and "the right to a decent environment is an inalienable right and requires no empirical justification" (Lawton 1980, 160).

10.

Evaluating Adult/Dementia Day Centers as Places

In the preceding chapters, we covered a broad range of issues related to adult day services and the places in which they are offered. In this chapter, our objective is to assist both design and care professionals in evaluating and improving existing adult day center environments. This task can be systematically accomplished with the help of an assessment tool called the Adult Day Center Environmental Design Assessment (ADC EA). The ADC EA included here is based on an earlier version (the Adult Day Center Environmental Design Review (ADC EDR) (Diaz Moore et al. 2001). The 164-item ADC EA began with a refinement of items from the ADC EDR and incorporated new items based on a review of environmental standards for adult day centers set by the National Adult Day Services Association (NADSA 2002) as well as new items evoked through a review of the Professional Environmental Assessment Protocol (PEAP) (Weisman, Lawton, Calkins, & Sloane 1994), an instrument that measures the experiential qualities of long-term special care units. The ADC EA is organized in terms of the eleven Attributes of Place Experience described earlier in this book.

For each attribute, the ADC EA lists a series of statements that describe certain elements, qualities, or characteristics of the environment. Each statement reflects an aspect of adult day center setting that contributes to positive place experience and is necessary for providing quality dementia-capable adult day care. Evaluators determine whether or not the statement applies to the adult day center under review and place a check mark in the "Y" column (for yes) if the statement is true, and in the "N" (for no) column if it untrue. After completing the ADC Environmental Review, they review those statements marked "N" for No: these are areas that warrant improvement.

The ADC EA allows for an analysis of existing adult day centers that assesses how the physical setting supports or hinders the success of the therapeutic and activities program and the realization of desired experiences. Thinking in terms of attributes deepens an understanding of each adult day center as a unique place with its own distinctive personality and explicates the complex relationship among activities, experience, and the physical setting.

Designing a better day for adult and dementia day center participants is a challenging, even daunting task, requiring tremendous effort. By sharing the responsibility, however, we can create adult day settings that enhance the quality of life for cognitively and physically impaired adults—a most deserving constituency.

Table 10.1. Adult Day Center Environmental Assessment (ADC EA)

Instructions: Read each statement as you walk through the ADC facility. Place a check mark in the Yes column if the statement is true of this ADC, or in the No column if the statement is *not* true of this facility. If the statement is not applicable (NA) to the facility, leave both columns blank.

	Y	N
The facility is visible from the street.		
The facility is well marked with signage identifying it as an adult day center.		
The location of front entrance to the adult day center is obvious from the outside.		
The appearance of the building makes a good impression and is a positive statement about the organization.		
The exterior of the facility and grounds are clean.		
The front entrance is well lit.		
Participants are protected from the weather (by a canopy, cover, or awning) at the point of arrival (car or van drop-off).		
The front entrance to the facility is a short distance (about 20 steps or less) from the point of arrival.		
There is a program space dedicated solely to the adult day center. This space is not shared with any other programs and is not used for purposes other than adult day services.		
Staff and program participants can easily see each other throughout the program space.		
Exits from the program space are monitored mechanically, electronically, or by staff surveillance.		
Entrance and exit monitoring systems are visually and audibly discreet.		
Exits are disguised naturally (i.e., located inconspicuously, concealed, or blended into the décor so as not to attract the attention of participants).		
Resources that make independent ambulation and transfers possible (i.e., handrails, grab bars) are present in all participant-accessible spaces.		
There are well-anchored handrails at all stairs, ramps, and in every toilet and bathing room.		
Access to handrails in all participant spaces is continuous.		
There are no obstacles such as carts, chairs, or other objects located or stored in walkways or activity areas that might impede independent ambulation.		
Wall and floor surfaces are non-glare and not slippery.		
Surfaces and edges are rounded, designed to minimize injury in the event of falls.		
Staff members appear to have enough room to assist participants in both public and private spaces.		
Potential hazards that nonetheless facilitate participants' independent functional abilities (i.e., stoves, kitchen utensils) are secured effectively but discreetly.		
Specialized assistive equipment (i.e., lifts) intended to ensure the safety of program participants and staff is available and convenient but stored discreetly.		
There are call devices in the toilet stalls, rest areas, and bathing rooms.		
There is a secure, accessible outdoor space adjacent to the program space that is used independently by participants.		

	Y	N
The design and construction of the building meets all applicable local, state, and federal health and safety regulations.		
All medications are kept in a designated secure area, away from participant activity areas.		
The procedures and equipment used in handling, storing, preparation and serving of food meets all local and state requirements.		
Toxic substances (whether for cleaning or activities) are stored in a secure area.		
There are at least two exits in the program space.		
There is an evacuation plan posted in the program space.		
Fire safety procedures approved by local or state authority are posted.		
An emergency first aid kit is visible and accessible in the program space.		
Smoking (whether by participants or staff) indoors, if permitted, is restricted to a designated, well-ventilated area away from the program space.		
Smoking in the outdoor area is permitted only in a designated area.		
Safety and Security Subtotal		

The lighting in the program space is not overly bright or too dark, but seems about right.		
There is at least one toilet to every six participants.		
The location of the toilet rooms is visible from throughout the program space.		
A toilet room is located no more than 40 feet from any point within the program space.		
Every toilet intended for participant use features grab bars.		
The color of the toilet and sink contrast with the color of the walls and floor.		
Sink faucets in the toilet rooms and kitchen are easy for the visually and physically impaired to use.		
There are home-like touches in the toilet rooms such as flowers, terrycloth hand towels, plants, and art prints on the walls.		
Clean hand towels are visible in the toilet rooms and kitchen and accessible for participants' use.		
There is a shower room available for participants who are able to bathe independently.		
Each adult day center participant has an assigned locker or cubby close to the toilet/bathing rooms where personal items (such as a change of clothing) are stored.		
Everyday utensils such as silverware (metal, non-plastic), coffee cups (not Styrofoam), and plates (non-disposable) are used at snack and meal times.		
Prosthetic utensils to facilitate self-feeding are provided to any participant who might well use them.		
Meals are served in such a way as to maximize each participant's ability to eat independently.		
The height of tables accommodates participants in wheelchairs.		
Basic cleaning tools and supplies (i.e., a broom or carpet sweeper) are available and used by participants.		

	Y	N
Cleaning equipment intended for participant use is designed for the physically impaired (i.e., large handle on broom, long handle on dust pan).		
There is a telephone available for participants to use.		
There are places to sit in or adjacent to the kitchen.		
Participants may use kitchen utensils; supervision is provided only when necessary.		
Participants may help themselves to beverages and snacks throughout the day.		
The activity settings are outfitted with "props" (i.e., newspapers, magazines, puzzles, playing cards) intended for spontaneous and independent use by participants.		
"Props" (i.e., newspapers and magazines) in the program space are current, in good condition, and replaced at least monthly if not more often.		
Participants use activity supplies and props spontaneously and independently.		
Participants are given opportunities to spend money within the facility as appropriate (i.e., at bake sales, the gift shop).		
There are outdoor places for gardening that are accessible to persons in wheelchairs.		
The program space provides a minimum of 100 square feet per participant. This does not include reception areas, storage areas, support spaces and offices, bathrooms, passageways, medical exam or therapy rooms, consultation or conference rooms, or services areas not regularly used by participants. Calculate this figure by multiplying the room dimensions (i.e., 20′ × 15′), then dividing by the average daily number of participants.		
Participants' movement is not impeded by design elements or obstacles (i.e., med, food, or cleaning carts) anywhere in the facility.		
Functional Independence Subtotal		

There is someone to greet participants as they arrive.		
The reception area is separate from the program space and not visually accessible from the program space.		
The décor of the reception area is welcoming and the furnishings clean and well-maintained.		
There is a place outside the program space (i.e., the reception area or separate coat room) in which participants can sit while waiting, resting, or putting on and taking off coats, boots, and hats.		
The program space features at least two or more distinct activity settings (defined by furniture arrangements, décor, bookcases, freestanding screens, or half-height walls). Examples of activity settings include a kitchen, dining area, craft area, or workshop.		
The different activity settings are visible from throughout the program space.		
The activity settings are differentiated either architecturally or in terms of décor.		
Activity settings feature everyday furnishings and props typically associated with the activities that occur in each setting.		
The names of activity settings accurately describe the activities that actually take place in each setting (i.e., eating in the dining room, craft work in the craft corner, Bingo at the games table, woodworking in the workshop).		

	Y	N
Common destinations such as the kitchen or toilet rooms are visible from throughout the program space.		
There is signage or graphics in the program space that facilitates orientation and wayfinding.		
There are "landmarks" (i.e., a distinctive plant or wall art piece) located at junctures to facilitate wayfinding.		
A daily activity program is posted that provides a "temporal landmark" through regularly scheduled events and activities.		
There are no strong color contrasts in the flooring.		
There is adequate office space for staff.		
There is adequate storage space for program and operating supplies.		
There is a room in which participants and families can have private discussions with staff.		
Orientation Subtotal		

The level of acoustic stimulation is not too loud or too soft, but about right.		
Equipment noises are not noticeable in the program space.		
Noises from outside the program space are not noticeable.		
Staff does not contribute to the noise level by yelling to each other or to participants.		
A PA system is not used.		
The type of music played in the program is appropriate to the participant population.		
There are windows with views to the outdoors in the program space.		
Blinds or drapes on the windows are used to control daylight and do not remain completely shut during the day.		
Some parts of the program space seem too bright or too dark.		
The level of lighting in transitional zones (such as the entryway that links the outdoors and inside, or in the hallway outside an examination room) minimizes visual adjustment (glare or dark).		
The amount of visual stimulation in the program space is not "too busy."		
Each activity setting is lit according to the activity for which it is used (i.e., brighter in the craft area than a conversational nook).		
Lighting levels in the program space vary throughout the day.		
Signs and graphics are intended to support the needs and interests of program participants rather than staff.		
Decorative items in the program space represent themes or subject matter familiar to program participants.		
The visual atmosphere of the program space is not institutional.		
The visual atmosphere of the toilet rooms is not institutional.		
The visual atmosphere of the bathing rooms is not institutional.		
There are no unpleasant odors in the program space.		

	Y	N
The temperature is kept at a level comfortable for participants.		
Quality Sensory Stimulation Subtotal		

The environment provides props that invite use (i.e., a small desk for writing letters, a potting bench for tending plants, a stack of current magazines for browsing) that are associated with familiar, everyday activities.		
The program space is personalized with props that reflect the preferences and interests of current participants.		
There are regular outings (at least once a month) to local businesses and places of interest to program participants (shops, museums, war memorials).		
The space features multiple activity settings among which participants may freely choose to use.		
Visual displays in the program space suggest age-appropriate (adult, not child-oriented) activities.		
Furniture arrangements in the room are oriented to encourage conversation between two or three people.		
The furniture is not normally arranged in a large activity circle or in theater-style rows.		
Meaningful Activity Subtotal		

Chairs and other seating are not arranged in a horseshoe or circle around the periphery of the program space.		
Chairs and other seating are placed at right angles to each other.		
Some furniture is arranged in conversational areas for two to three people.		
There is no permanent or semi-permanent seating arrangement that accommodates more than six participants.		
Dining tables seat smaller groups (two to four people), not six or more.		
A television is not a focal point.		
There is a mix of dining table sizes, some seating two, some seating four.		
There is no single table designed to seat six or more in the dining area.		
The program space features a variety of social props (i.e., magazines, newspapers, knick-knacks) that are used independently by participants.		
Participants may move and rearrange chairs and tables as they like throughout the day.		
Staff facilitates and respects independent social interactions between participants.		
Program participants may sit with staff members as they do daily charting and other paperwork.		
Social Interaction Subtotal		

There are conversational seating arrangements for just two or three people.		
Participants have the option of not participating in an activity.		
Program participants are allowed to spend time on their own during the day.		

	Y	N
Each toilet room is private (used by one participant at a time, with staff assistance as necessary).		
The showering or bathing room is private (used by one participant at a time, with staff assistance as necessary).		
There is a private space for participants to visit with staff, family members, health care professionals, clergy, and the like.		
There is a separate yet supervised space designated as a rest area, located away from activities areas and near a toilet room.		
Privacy Subtotal		

There are more than two activity settings within the program space.		
There is more than one route for participants to choose for "taking a walk."		
Participants are not regularly told, directed, or encouraged where to sit.		
Participants are allowed to choose whether to take part in an activity.		
The spontaneous activities of participants (e.g., conversations, a card game) are encouraged throughout the day, and when these occur, they are respected and not interrupted.		
There are times during the day when more than one scheduled activity is going on in the program space.		
To the extent possible (i.e., within reason, and within dietary limitations), participants are offered choices of food and beverages at meal and snack times.		
Participants are not physically restrained in chairs.		
There are plenty of books, magazines, and other items for participants to pick up and look at as they like.		
The number of places to sit in the program space exceeds the average daily participant census.		
Participants' opinions of temperature and lighting are respected and responded to in some way (i.e., either room temperature is adjusted or a participant is given a sweater if s/he is cold).		
Personal Control Subtotal		

The program space features items that represent the interests of current program participants.		
Mementos that represent the life experiences of current program participants are displayed within the program space.		
Furniture and furnishings are more residential than institutional.		
There are a variety of types of furniture (chairs, sofas, tables, hutches) in the program space.		
There are coffee tables, end tables, and table lamps in the program space.		
No pieces of institutional equipment are visible in either public spaces (i.e., hallways) or the primary program space.		
There is no obvious "nursing station" in the program space.		

	Y	N
Public areas are decorated with items that illustrate ties to the past: local historic scenes, signs or symbols from earlier years, shared cultural or religious symbols.		
Program participants may use the kitchen.		
The kitchen is accessible to persons with mobility impairments.		
The kitchen is observed being used independently by program participants.		
Program participants are encouraged and allowed to help clean up after snacks, meals, and activities.		
There are housekeeping activities to complete during the day, such as folding towels, sweeping, wiping tables, etc.		
Cleaning tools and supplies are available and used by participants.		
There are places for gardening (i.e., indoor potted plants or outside plots).		
There are more than two activity settings in the program space that relate to former or current occupations or hobbies of participants (e.g., office space with desk, potting bench, woodworking bench).		
There are no stuffed animals or other distinctly childlike props in the program space.		
There are regular visits (at least once a month) from a children's day care center.		
There are regular visits (at least once a month) from school age and high school student groups.		
There are regular visits (at least once a month) from pets (dogs, cats, etc.).		
Continuity of Self Subtotal		

There are elements in the environment with the potential to evoke uplifting thoughts.		
There are places that invite private reflection.		
There are places that afford the opportunity for a small group to worship together.		
Spirituality Subtotal		

There are architectural elements (e.g., windows, stained glass window, decorative columns) that invite attention (framing a view out of a window or imparting light and color).		
The space has an obvious focal point (a fireplace, flower arrangement, work of art) that invites conversation.		
The space is decorated in a way that uses a diversity of complementary colors and textures.		
The furnishings coordinate with each other and with the decorating scheme.		
The program space is decorated in an age-appropriate (adult rather than childlike) manner.		
Architectural Delight Subtotal		

When you have completed the entire assessment, transfer the number of Yes marks for each attribute onto the table below. A high score for an individual attribute indicates the ADC is providing sufficient support for that attribute; a low score indicates the ADC has room to improve its support for that attribute. Also calculate a sum total for the assessment. You can use the sum total to make comparisons of different ADCs or to make a comparison of a single ADC over time to gauge its improvements in environmental attributes.

Environmental Attribute	*Possible Score*	*Assessment Score*
Safety and Security	34	
Functional Independence	28	
Orientation	17	
Quality Sensory Stimulation	20	
Meaningful Activity	7	
Social Interaction	12	
Privacy	7	
Personal Control	11	
Continuity of Self	20	
Spirituality	3	
Architectural Delight	5	
Total Score	164	

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Conclusion

Multiple goals have shaped the preceding ten chapters: raising awareness of adult day services as a new place type; enhancing understanding of adult day centers as living, vibrant places with their own personalities; explaining how such places need to be carefully planned, designed, and constructed in order to further their tremendous therapeutic potential. We hope these topics have equipped readers with the requisite knowledge for critical place making. We embarked on this journey because of our belief in the rich potential of adult day services for improving the lives of people experiencing dementia and those who provide their care.

As environmental gerontologists, our foremost concern is the quality of life for older persons, particularly those with cognitive impairment. All too often aging is associated solely with pathologies, typically of chronic conditions. However, as we hope we have made evident in preceding chapters, dementia in particular, needs to be understood not so much as a pathology as an experience—one influenced by the environment with which the person interacts. As Lawton and Simon (1968) stated in their seminal environmental docility hypothesis, "The less competent the individual, the greater the impact of environmental factors upon that individual." Thus, we believe it is imperative to improve environments as best we can for those at greatest risk. As we hope you have been persuaded, careful understanding of design as process—as place making—is essential to the creation of healthy settings for adult day services.

Yet significant hurdles limit the effective proliferation of such quality places in our aging communities. Using our Model of Place, we enumerate some of the critical decision points that must be addressed in order to foster greater autonomy and self-worth for older persons.

People

At the *individual level,* we first need to recognize the overwhelming desire of the elderly to maintain their independence in the community for as long as possible. As a recent AARP study indicates, a staggering 89 percent of older respondents seek to age in place (AARP 2000). Thus, the creation of services that help seniors live independently in the community should be a high societal priority. We need to better educate our older population about the options available to them as they begin to need supportive services. Just as people readily recognize the availability of school, child care, and after-school programs for children, comparable supportive services for the aging—home health care, home care services, senior centers, and adult day services—must become far more familiar.

But promotion of elderly independence in the community must go beyond awareness and result in targeted investment. As a society, we continue to invest in a long-term care system predicated on the acute care model. Yet we know that between 20 and 40 percent of the older population in institutional settings are "over-institutionalized" and could be better served through lower levels of care, including the home and home health care (Simons 1989, as cited in Leibrock 2000). This push toward maintaining individuals as independently as possible in their homes should be the goal of innovative design and policy in the upcoming years. For example, while home health care services do a wonderful job of providing specific care interventions for people in their homes, the manifestations of aging are often more systemic than discrete. Issues of social isolation, cognitive stimulation, and physical activity are as important for quality of life as is daily nursing care. Once an elderly person requires more than two hours of services per day or demonstrates need for a greater social network, adult day services should be seen as an available and desirable option. In other words, a range of long-term care options needs to be provided for seniors in response to their quite heterogeneous desires and needs. It is only through a more inclusive and responsive range of programs that independence for seniors is most likely to be advanced.

At the *group level,* staffing is a huge issue within adult day services. First, we know from a recent survey (Cox 2003) that most ADCs have a staff-to-participant ratio of 1:8, well above the 1:6 standard advocated by the National Adult Day Services Association. Here is evidence of an industry struggling to provide what they believe to be a minimum standard. While there are several reasons for this, the impacts are clear. Fewer staff are available to provide direct care services, and concomitantly, staff feel greater burden. It is little wonder that the annual NADSA meetings always include sessions regarding staff burnout and retention.

The societal cost of dementia has been estimated to be over $100 billion per year (Ernst & Hay 1994). The majority of these costs directly affect the life quality of the families involved. The lost days of work, the daily stress of caring for someone with dementia, the inevitable fatigue, often multiplied by a pervasive sense of guilt, all exact profound costs. Businesses and civic organizations need to recognize that the challenges confronted by families dealing with dementia will only grow as the numbers of those experiencing dementia grows. The costs of dementia to American business are estimated to be $61 billion per year (Koppel 2002). If only for reasons of enlightened self-interest, businesses should recognize the value of helping families pay for adult day services. Such assistance would reduce lost work days of employees forced to stay home and take care of an elderly family members or improve productivity of employees who go to work but suffer from worry or anxiety associated with a frail elder. In addition, the assistance would allow experienced employees to remain in the work force instead of dropping out to provide in-home care.

This brings us to the *organization level,* where we find numerous problems with respect to adult day services. First, most ADCs operate with a loss margin averaging 18 percent, and many use grant funds to augment participant fee revenue. Although keeping the fee structure relatively low reflects admirable concern for elders, it is nonetheless disconcerting to learn that

ADCs in general are operating on the "razor's edge." Any organization that must rely on philanthropy to sustain itself is highly susceptible to the vagaries of the local economy. To ensure that the ADC industry remains viable, many more adult day centers must become self-sufficient. They need training assistance that focuses on successful, self-sufficient business models.

Self-sufficiency is made all the more difficult by the fragmented funding streams within which adult day services operate. Clearly, the federal government needs to recognize that this place type delays extraordinarily costly institutional care. After numerous attempts, Congress finally passed the Demonstration Project for Medical Adult Day-Care Services in 2003; it began implementation in 2005. The project makes Medicare funds available, but only home health care agencies can apply for them, reflecting a lack of recognition of the adult day service industry. It is clear that Congressional members remain largely ignorant of this industry and its potential. To raise awareness, granting organizations should fund well-crafted proposals that address issues of public policy and advocacy, but most importantly, that document adult day service health outcomes. ADCs lack the resources to fund such initiatives on their own and desperately need to find allies within the philanthropic community.

Program

The National Adult Day Services Association has teamed with the Commission on Accreditation of Rehabilitation Facilities to create an accreditation process for ADCs. Those that meet the standards and guidelines of the association can become accredited. Such a self-directed activity reflects the desire of the industry to become more widely recognized as a serious and vital component within long-term care. Yet few organizations are currently accredited. Many cannot afford the process (see the discussion of revenue streams above). But more importantly, they need to see a payoff. When—and we do believe it is when—Congress finally opens up reliable funding streams for adult day services, there will be a payoff: we firmly believe these funds will be limited to accredited ADCs. We also believe that this limitation will help the industry. Accreditation is awarded to ADCs that meet quality benchmarks or standards. As we already have pointed out, many ADCs simply do not meet these standards. We might speculate that quality variation is part of the reason that the adult day service industry lacks evidence-based outcomes. Currently, if you have seen one ADC, you have seen but one ADC. The industry is incredibly diverse, and accreditation will help develop uniformity and baseline measures. We hope that additional advocacy in support of, and reward for, accreditation will grow in the near future.

The diversity of ADC programs reflects a level of sophistication in service delivery that allows ADCs to respond to specific community need. Adult day centers are viable, cost-effective, community-based long-term care services that help keep individuals at home, in the community, with family and friends for as long as possible. This is a story to be told and told again. We encourage NADSA to develop an adult day services best-practices journal and use it as a mechanism for disseminating information about the many successful adult day service programs. Of course, best practices are measured against industry benchmarks, and therefore research into developing bench-

marks is essential. Our hope is that state and national organizations would fund research aimed at developing such a resource. It would be important in terms of continuous quality improvement efforts both within organizations and industry-wide and in regard to public policy advocacy.

Physical Setting

This brings us to the *physical setting,* the "silent partner" in enhancement of quality of life. First, we would be pleased to see more adult day services follow a development process that parallels the one discussed in this book; there need to be serious efforts to negotiate user needs and organizational abilities with the physical setting as an essential mediator between the two. Unfortunately, the expense of capital projects and the huge outlays of cash they require work against such a process-based approach. Projects are typically funded through some sort of loan package that then distributes the costs—principal plus interest—over time. One strategy by which banks, foundations, and other organizations could significantly and positively improve the quality of adult day service settings would be to offer low-interest development loans. A savings of even one point in interest payments can often move a project from dream to reality.

If the physical setting is going to serve as a facilitating mediator between user and organization, adult day providers and architects must learn more about fundamental environment-behavior relationships and environmental gerontology research. Such research highlights how critically important it is for providers and architects to incorporate pre-design planning and programming with development of mission and pro forma. While these stages are critical in shaping the direction and character of an adult day center, there is often a desire to move through them as quickly as possible—for good reason. Planning expenses are typically soft, and no one reimburses for them. We encourage private foundations to fund technical assistance for pre-design planning and programming. Critical decisions made early in the process affect all aspects of the resultant therapeutic milieu. It is most effective, in terms of both efficacy and cost, to correct mistakes before concrete is poured rather than after it hardens.

Too often, however, we fail to heed such advice, forgetting how influential our physical settings can be. By way of example, we are only now becoming aware of how suburbanization is negatively affecting our health as a consequence of reduced physical activity and degraded air quality (Frumkin, Frank, & Jackson 2002). It is noteworthy that suburbanization has been the model for residential development since at least World War II despite the fact that such questionable development patterns result in many seniors becoming socially isolated, without access to basic goods and services such as groceries, pharmacies, and medical care unless they have an automobile. To avoid the aforementioned pitfalls associated with suburbs, ADCs and other long-term care services must be neighborhood-based. This approach may challenge the segregated land use logic reflected in current zoning codes, but those codes are outdated and discriminate against our aging population. Thus we strongly advocate the adoption of principles of universal design and human-centered sustainability, not only at the building scale but also at the scale of the community and the city. Adherence to such principles would go a

long way toward making our macro-environment supportive of successful aging.

Finally, we return to the place experiences engendered by adult day services, which form the core of this book. As described in preceding chapters, adult day services have the potential to provide meaningfully therapeutic experiences for substantial numbers of elders, including those with physical and/or cognitive impairments. It is our goal to promote environmental decisions that improve the quality of life for those with little voice in our society, including both the young and the very old. We hope that in some ways, large or small, this book helps move adult day services, long-term care, and our aging society a bit closer to that "better day."

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